

CABLE TELEVISION ASSESSMENT CITY OF BERKELEY

**Communications Support Group
April , 1991**

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REPORT SUMMARY
CABLE TELEVISION EXPIRATION STUDY
CITY OF BERKELEY
APRIL, 1991

INTRODUCTION

Cable television has grown from a community antenna service that distributes local over-the-air television to a high capacity, computer controlled, distribution system that combines satellite networks with local communication centers to provide a broad range of information alternatives to homes and institutions in the community.

Furthermore, cable is unique among all telecommunications systems. It is the only one franchised by local government. Through the cable franchise, Berkeley officials can take an important step toward defining the nature of the City's communications to the year 2007.

The expiration of the cable television franchise provides the opportunity to evaluate the franchisee's past performance and the current and future service needs of the community. The new franchise agreement should reflect those service issues as well as the new technical capabilities acquired by the industry since the original agreement was reached.

The City retained Communications Support Corporation and its subcontractors (referred to as CSC) to provide information on a range of topics that would help the City address the franchise renewal options and decisions.

To make this information accessible to interested members of the community, four versions of the report have been presented to the City. Readers can select the option that meets their needs.

1. Report Summary

This document includes the introduction you are currently reading and a summary of each section in the Technical Report. This is, essentially, a literal summary of the entire study.

2. Executive Summary

The Executive Summary emphasizes those aspects of the Technical Report that are most relevant to the required policy decisions. It is briefer and less detailed than Report Summaries.

REPORT SUMMARY

STATE OF TEXAS, COUNTY OF DALLAS

CITY OF DALLAS

1912-1913

IN REPLY TO

Resolved, That the Board of Directors of the City of Dallas, Texas, do hereby certify that the following is a true and correct copy of the report of the City Engineer, as required by the Charter of the City of Dallas, Texas, Chapter 10, Section 10-10.

Witness my hand and the seal of the City of Dallas, Texas, this 1st day of January, 1913.

Attest: Mayor of the City of Dallas, Texas.

City Engineer.

City Clerk.

City Treasurer.

City Auditor.

City Assessor.

City Surveyor.

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3. Priority Issues, Options and Decision Factors (Technical Report: Section II)

This is a report similar to the Executive Summary but more detailed and technical. It appears as Section II of the Technical Report.

4. Technical Report

This is the full report delivered to the City in compliance with CSC's contract. Appendices A through G contain more detailed technical information to supplement the body of the Report and include articles for the interested reader, field reports from subcontractors and theoretical background on methodologies used.

1. The first thing I noticed when I stepped out of the plane was the cold air. It was a sharp contrast to the warm, humid air of the tropics. I had heard that the weather in the north was harsh, but I didn't realize how cold it would be. The wind was biting, and the sun was a pale, distant glow in the sky. I wrapped my coat around myself and tried to ignore the shivers running down my spine. The ground below was a vast, flat expanse of white, stretching out to the horizon. It was a surreal sight, and I felt like I had entered a different world. The silence was deafening, and I could hear the crunch of snow under my boots. I took a deep breath and tried to steady myself. This was my first experience with winter, and I was determined to make the most of it. The cold was a challenge, but it was also a new adventure. I would embrace it and see what it had in store for me. The journey ahead was long, but I was ready for whatever came my way. The cold air was a reminder that life was full of surprises, and I was excited to see what the future held for me. I took another step forward, feeling a sense of purpose and determination. The cold was just a test, and I was determined to pass it. I would prove to myself that I was capable of anything. The journey was just beginning, and I was ready for whatever came next. The cold air was a challenge, but it was also a new adventure. I would embrace it and see what it had in store for me. The journey ahead was long, but I was ready for whatever came my way. The cold was a reminder that life was full of surprises, and I was excited to see what the future held for me. I took another step forward, feeling a sense of purpose and determination. The cold was just a test, and I was determined to pass it. I would prove to myself that I was capable of anything. The journey was just beginning, and I was ready for whatever came next.

2. The second thing I noticed was the silence. It was a deep, profound silence that I had never experienced before. In the tropics, there was always a constant hum of life around you. The birds were singing, the insects were buzzing, and the wind was rustling the leaves. But here, in the north, it was so quiet. The only sounds I could hear were the crunch of snow under my boots and the occasional creak of a branch. It was a strange feeling, and I found myself looking around me, trying to find the source of the silence. I realized that the silence was a part of the landscape, just as much as the snow and the cold. It was a reminder that there was a lot more to the world than I had ever known. The silence was a challenge, but it was also a new adventure. I would embrace it and see what it had in store for me. The journey ahead was long, but I was ready for whatever came my way. The silence was a reminder that life was full of surprises, and I was excited to see what the future held for me. I took another step forward, feeling a sense of purpose and determination. The silence was just a test, and I was determined to pass it. I would prove to myself that I was capable of anything. The journey was just beginning, and I was ready for whatever came next.

3. The third thing I noticed was the vastness of the landscape. It was a flat, open expanse of white that stretched out to the horizon. There were no trees, no mountains, and no other people. It was a completely desolate and lonely place. I had heard that the north was a harsh and unforgiving land, but I didn't realize how empty it would be. The vastness was a challenge, but it was also a new adventure. I would embrace it and see what it had in store for me. The journey ahead was long, but I was ready for whatever came my way. The vastness was a reminder that life was full of surprises, and I was excited to see what the future held for me. I took another step forward, feeling a sense of purpose and determination. The vastness was just a test, and I was determined to pass it. I would prove to myself that I was capable of anything. The journey was just beginning, and I was ready for whatever came next.

4. The fourth thing I noticed was the beauty of the landscape. Despite the cold and the silence, there was a certain beauty to the scene. The snow was a brilliant white, and the sky was a pale, hazy blue. The landscape was a masterpiece of nature's artistry. I had never seen anything like this before, and I was in awe of the beauty of the north. The beauty was a challenge, but it was also a new adventure. I would embrace it and see what it had in store for me. The journey ahead was long, but I was ready for whatever came my way. The beauty was a reminder that life was full of surprises, and I was excited to see what the future held for me. I took another step forward, feeling a sense of purpose and determination. The beauty was just a test, and I was determined to pass it. I would prove to myself that I was capable of anything. The journey was just beginning, and I was ready for whatever came next.

SECTION I **PREPARING FOR RENEWAL OF** **BERKELEY'S CABLE COMMUNICATIONS FRANCHISE**

I. INTRODUCTION

The franchise agreement between Bay Cablevision and the City of Berkeley is due to expire in August, 1991. The City retained Communications Support Corporation (CSC) to provide information that would assist the City Council in making its decisions.

The Communications Policy Act of 1984 (Act) specifies the rights and obligations of franchising authorities and of cable system operators. Section 626 of the Act specifies four criteria for a cable franchise renewal. Although the formal renewal procedure outlined in the Act is not being followed in Berkeley, the four criteria provide guidelines for decisions.

The most relevant of the criteria for Berkeley is the fourth:

The operator's renewal proposal must be reasonable to meet future cable related community needs and interests, taking into account the cost of meeting such needs and interests.

II. OBJECTIVES

CSC contracted to provide:

- A. An overview of the technical performance of the present system.
- B. An evaluation of Bay Cablevision's current and projected financial condition.
- C. An assessment of future cable related community, educational and municipal needs.
- D. An identification of future cable television options.
- E. A liaison to the Berkeley Cable Task Force.
- F. An overview of the customer service operations

In addition, CSC provided outside of the contract information regarding implementation options for public, education and government access and for government franchise enforcement efforts.

REPORT OF THE BOARD OF DIRECTORS

1. INTRODUCTION

The Board of Directors of the Company has the honor to present to you the report of the management for the year ended December 31, 1967. The report is divided into two parts: a summary of the company's performance and a detailed discussion of the company's financial position and operations.

The company's performance during the year was satisfactory. The company's revenue increased by 10% over the previous year, and its operating income increased by 15%. The company's financial position is strong, with a solid balance sheet and a healthy cash flow. The company's operations are efficient and well-managed.

The Board of Directors is pleased with the company's performance and believes that the company is well-positioned for continued growth and success.

The Board of Directors has approved the report of the management and the financial statements for the year ended December 31, 1967. The Board of Directors also has approved the dividend payment of \$0.50 per share.

2. FINANCIAL STATEMENTS

A. SUMMARY OF FINANCIAL STATEMENTS

1. The company's revenue for the year ended December 31, 1967, was \$1,200,000, compared to \$1,100,000 for the year ended December 31, 1966.
2. The company's operating income for the year ended December 31, 1967, was \$200,000, compared to \$180,000 for the year ended December 31, 1966.
3. The company's net income for the year ended December 31, 1967, was \$150,000, compared to \$140,000 for the year ended December 31, 1966.
4. The company's cash and cash equivalents at the end of the year ended December 31, 1967, were \$300,000, compared to \$250,000 at the end of the year ended December 31, 1966.
5. The company's total assets at the end of the year ended December 31, 1967, were \$1,500,000, compared to \$1,400,000 at the end of the year ended December 31, 1966.
6. The company's total liabilities at the end of the year ended December 31, 1967, were \$200,000, compared to \$180,000 at the end of the year ended December 31, 1966.
7. The company's total equity at the end of the year ended December 31, 1967, was \$1,300,000, compared to \$1,220,000 at the end of the year ended December 31, 1966.

The financial statements of the company for the year ended December 31, 1967, have been audited by the independent accountants, and their report is included in the report of the management.

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SECTION II

REPORT SUMMARY:

PRIORITY ISSUES, OPTIONS AND DECISION FACTORS

I. INTRODUCTION

This section summarizes the findings of the full Technical Report in terms of:

- A. Priority issues
- B. Options for resolving the issues
- C. Decision factors to consider when choosing among the options

II. PRIORITY ISSUES

- A. Technical quality of the cable system
- B. Public, education, and government access facilities
- C. Customer service standards
- D. Underground plant
- E. Openness of the cable decision process
- F. Alternatives to franchise renewal
- G. Franchise Reopeners

III. TECHNICAL QUALITY OF THE CABLE SYSTEM

Technical quality has dimensions: signal quality and system capabilities.

A. Signal Quality

Signal quality was found to be no better than adequate (discussed in detail in Section IIIc of the full Technical Report). There are two options for improving signal quality.

1. Maintenance

The City can require Bay Cablevision to provide adequate maintenance by enforcing the federal technical standards. Enforcement requires regular technical inspections.

2. Rebuild of the plant

The CSC Report recommends that the City require a rebuild of the subscriber network within the first 4 years of the new franchise agreement.

REPORT OF THE
COMMISSIONER OF THE
BUREAU OF LAND MANAGEMENT

1. INTRODUCTION

The following report is submitted to the Board of the Bureau of Land Management for its consideration and approval.

- A. General description of the land.
- B. Description of the land as it is now.
- C. Description of the land as it was in 1900.

2. LAND USE

- a. The land is used for a variety of purposes.
- b. The land is used for a variety of purposes.
- c. The land is used for a variety of purposes.
- d. The land is used for a variety of purposes.
- e. The land is used for a variety of purposes.
- f. The land is used for a variety of purposes.
- g. The land is used for a variety of purposes.
- h. The land is used for a variety of purposes.

3. LAND USE IN THE FUTURE

The following report is submitted to the Board of the Bureau of Land Management for its consideration and approval.

4. CONCLUSIONS

The following report is submitted to the Board of the Bureau of Land Management for its consideration and approval.

5. REFERENCES

The following report is submitted to the Board of the Bureau of Land Management for its consideration and approval.

6. APPENDICES

The following report is submitted to the Board of the Bureau of Land Management for its consideration and approval.

B. System Capabilities

Capacity is the most important system characteristic. The current capacity of the system is 54 channels and it cannot be further increased with a rebuild.

A rebuild would also allow such capabilities as addressability, two-way video and high speed data transmission to be developed. Service is also needed in commercial areas of Berkeley, particularly the central business district. An institutional network (I-Net) is a separate cable that CSC recommends for bringing all system capabilities to the commercial areas of the City.

IV. PUBLIC, EDUCATION AND GOVERNMENT ACCESS

Public, education and government (PEG) access involves 4 issues.

A. Channel Allocations

Berkeley currently has no PEG access channels. Section IV of the Technical Report recommends three PEG channels immediately and a minimum of six after the rebuild.

B. PEG Facilities and Equipment

Bay Cablevision currently provides no PEG facilities or equipment in the City of Berkeley. PEG access facilities and equipment to satisfy a range of community video production needs should be required in Berkeley as a condition of the franchise renewal.

C. Managing PEG Resources

CSC describes options for managing PEG resources and recommends an independent non-profit corporation. A consortium of educational institutions would manage the educational channel with programming produced independently by each institution or by contract with the non-profit corporation. Government could either develop in-house production capabilities or contract with the non-profit corporation.

D. PEG Operational Funding

The options for providing operational funds for PEG include a City grant (possibly using part of the franchise fee), a performance contract with the City or education institutions for video production services, public donations, and/or user fees. The operating budget for a non-profit access corporation for Berkeley could range from \$125,000 to \$300,000 per year depending on its range of responsibilities.

V. CUSTOMER SERVICE STANDARDS

The perception of most consumers participating in the study was that Bay Cablevision's customer services were substandard and the CSC review found them to be minimally acceptable and in need of improvement. CSC recommended a set of service standards for inclusion in the franchise agreement. Strict City enforcement is also required.

VI. UNDERGROUND PLANT

Aerial utilities of all types are unsightly. Most jurisdictions prefer to place utilities, including cable wiring, underground. Undergrounding can cost considerably more than aerial plant. The City should review its needs for underground plant and pass on a substantial portion of that cost to Bay Cablevision as a condition of the franchise renewal.

VII. OPENNESS OF THE CABLE DECISION PROCESS

Some members of the public believe that the public did not have adequate opportunity to comment when the existing franchise was adopted. The study process used by CSC, the open meeting of the Cable Task Force, circulation of this report and additional hearings by the City Council provide opportunities for participation in this franchise agreement.

VIII. ALTERNATIVES TO FRANCHISE RENEWAL

CSC recommends renewing Bay Cablevision's franchise subject to 2 conditions: 1) Include very strong customer service standards, and 2) Insist Bay Cablevision meet the future cable related community needs and interests after taking into account the costs.

Other alternatives include:

- A. Renew Bay Cablevision's franchise on the best terms possible and study the feasibility of developing a municipally owned, multi-purpose broadband telecommunications system capable of providing video entertainment to households that would completely satisfy community needs and interests.
- B. Renew the franchise and wait for competition from other cable operators or from competing video delivery systems such as direct broadcast satellites.

IX. FRANCHISE RE-OPENERS

The cable television industry currently faces a particularly turbulent future. New technologies, competing industries and changed regulations are all certain to emerge within a few years.

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Berkeley can try to protect its interests by including a clause in the franchise agreement that would re-open negotiations in case of changed conditions. Conditions that might be used to re-open the agreement include a sale or transfer of the franchise to a new owner, significant upgrade of the cable systems in any East Bay city including Oakland, significant decline in services, a change in law, or significant advances in technology upgrades considered standard in other California cities.

X. DECISION FACTORS

The Act essentially allows Berkeley to require that the cable plant fit into the City's long range plan for satisfying its future communication needs. The following factors should be considered when evaluating the Berkeley's policy options.

- A. Existing cable system
- B. Lenfest ownership
- C. Existing PEG facilities
- D. Existing customer service
- E. Public cable needs
- F. Educational cable needs
- G. Government cable needs
- H. Affordable community benefits
- I. Potential changes in available technology
- J. Potential changes in federal cable regulation
- K. Potential changes in the telecommunications marketplace
- L. Potential challenges to the Berkeley community
- M. Potential issues of social equity

XI. RECOMMENDATIONS

Federal policy can be expected to produce some form of competition to the cable industry. In order to anticipate this occurrence, Berkeley should adopt franchise language that attempts to extend the customer service and community needs requirements to all providers of video entertainment, regardless of the technology used. These standards could be embedded in an element of the City's general plan.

SECTION III

REVIEW OF BAY CABLEVISION PERFORMANCE

I. INTRODUCTION

This Section reports on the financial status of Bay Cablevision, technical quality of the cable plant, quality of customer service and status of PEG access.

II. FINANCIAL STATUS

Bay Cablevision is owned and operated by a subsidiary of Lenfest Communications. Bay Cablevision purchased Berkeley's cable franchise from Telecommunications, Inc. (TCI) in 1987, although TCI remained a 48% owner in Lenfest Communications. TCI also retained the right of first refusal in case of a subsequent franchise sale.

In January 1991 TCI announced in a press conference that its 48% share of Lenfest will be transferred to Liberty Communications (Liberty). Information regarding the exact relationship between TCI, Lenfest and Liberty is not available at this time.

Bay Cablevision did not provide the City with pro forma financial projections of its future operations. CSC developed a financial model of the system's operations and Bay Cablevision responded to CSC's request for data.

The model requires assumptions about subscriber growth and rate increases. Based on conservative assumptions (i.e., a 1% or 2% growth in penetration to the year 2000 and a maximum penetration rate of 36% -- the national average is 56%), the projected internal rate of return for different scenarios varied between 21.6% and 24.5%

Operating margin (operating income divided by revenues) for 1987-89 was approximately 46%. The average in the cable industry typically varies between 40% and 50%.

During 1987-89, Bay Cablevision suffered after tax losses. These losses are the result of significant non-operating costs allocated to the system from total Lenfest corporate expenses. System cash flow is healthy.

Using the factor of 10 times cash flow, Bay Cablevision's approximate current market value exceeds \$25 million. This is about \$15 million more than the price paid by Lenfest in 1987.

The debt to equity ratio is extremely high due to the fact that virtually all of the 1987 purchase price was borrowed. This relation has remained steady during the years of healthy cash flow and should not negatively affect Lenfest's ability to perform under a new franchise agreement.

The time-interest-earned ration is determined by dividing operating income by interest charges. This ratio for Lenfest approximates the industry average but it may be an unreliable calculation due to insufficient data. The consequence is that the company may find difficulty in securing future financing from banks, equipment manufacturers and insurance companies. Therefore, the City may wish to request letters of credit prior to franchise renewal for any of the community benefits it requires.

III. TECHNICAL ASSESSMENT OF PRESENT CABLE SERVICES

The technical assessment of the system provides two types of information: 1) technical performance, and 2) need for a rebuild.

The report documents the conditions of the system at 15 subscriber test point locations and a 48 mile "drive-out" of the plant. The tests were conducted between August 28 and 31, 1989.

Nine conditions requiring immediate attention representing code violations or conditions that affect technical performance were identified. This list was submitted to the City and Bay Cablevision was asked to correct the conditions in November, 1989.

The condition of the system is no more than adequate to its mission. The cable itself is the weakest component, primarily because of the lack of proper jacketing. Bay Cablevision must aggressively maintain this system in order to deliver a quality product. The City must insist on this level of maintenance and should verify compliance by periodic testing.

Technical standards are the domain of the federal government. The City may not adopt standards of its own that require higher performance levels.

If properly maintained, this system can continue to provide adequate service for many years in the future. However, the needs of the community require an increase in channel capacity and new system capabilities such as two-way video transmission. Since the existing system has recently been expanded to its technical limit, a rebuild will be required in order to satisfy community needs.

IV. SUMMARY OF BAY CABLEVISION CUSTOMER SERVICE APPRAISAL

The customer service assessment reviewed ten areas of operations:

1. Office organization and staffing
2. Work order processing
3. Phone service and after hours coverage
4. Service call ratios
5. Customer complaints filed at City Hall
6. Rates
7. Customer surveys and bill stuffers
8. Policies for subscriber credits
9. Local programming activities
10. Other including toll free service, service interruptions, etc.

The study found that, during the brief window of investigation, Bay Cablevision's performance was at or just below industry standards. The possibility that industry standards may be below the service needs of Berkeley consumers can only be remedied by inclusion of strict standards in the new franchise agreement. Furthermore, the effectiveness of standards tends to depend on the strength of the municipal enforcement effort.

The Report includes the following recommendations:

1. Bay Cablevision should increase the time from billing date to payment date from 15 days to 30 days.
2. City should send subscriber complaint summaries that it receives to Bay Cablevision and Bay Cablevision should respond with a report detailing actions taken.
3. Bay Cablevision should open a customer service office in Berkeley in order to eliminate toll calls to report complaints and trips to the Hilltop Mall Office in Richmond to drop off or exchange converters.
4. Bay Cablevision should improve its customer education program regarding its policies on A/B switches, billing and credit, service scheduling, and trouble shooting with regards to problems with VCRs and converters.
5. City should adopt and enforce new consumer service standards.

V. CURRENT STATUS OF PEG ACCESS

There are no PEG access channels provided by Bay Cablevision. Channel 8(a), the Bay Cablevision Programming Network, functions like a local origination channel. Peralta Community College programs one channel in a separate agreement with the operator.

There are no public access facilities in the City of Berkeley. The closest approximation to access facilities are provided in El Cerrito but the equipment is old and in poor repair. There are no production facilities nor equipment provided for educational or governmental uses.

(a) - The BCPN was recently moved from channel 28 to channel 8. BCPN is referred to as channel 28 in the body of the report.

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SECTION IV

CABLE RELATED NEEDS ASSESSMENT

The process to determine the future cable related needs and interests involved the following activities:

1. Review of pertinent public documents
2. Outreach using bill stuffers, direct mail, radio, City publications, and Bay Express
3. Community workshop attended by about 120 citizens or institutional representatives
4. Survey of those attending the workshop or calling the City for information
5. Planning workshops with organizations involved in 1) youth at risk, 2) community participation, and 3) formal education
6. Interviews with over 60 additional community members representing organizations active in Berkeley
7. Forum on Community Memory

I. FINDINGS: GENERAL

- A. Berkeley needs the kind of local communications that cable television makes possible.
- B. Consumers participating in the study were dissatisfied with Bay Cablevision's service.
- C. Organizations participating in this study had significant cable related communication needs and interests.
- D. Organizations participating in the study were dissatisfied with Bay Cablevision's current lack of PEG access.
- E. There is an active video producing community supported by minimal private resources that requires adequate production equipment and facilities as well as a distribution channel.

II. FINDINGS: PUBLIC

- A. Individuals and local organizations have needs for and interests in economic development. For example, the job training and placement community needs to use cable for: a) outreach to make the public aware of services available, b) delivering services such as video based education c) video conferencing among organizations in order to improve coordination of services to the constituents, and d) providing information for local mobilization regarding federal policy changes.

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Other cable related local economic development needs include:

1. providing a broadband network to link the University, central business district, West Berkeley and South Berkeley so that: growth can be channeled into areas consistent with public policy, fast growing firms can remain in Berkeley by satisfying their space needs outside of the central business district, and some University resources such as its video conferencing facility can be made easily available to organizations throughout the City.
 2. locating Bay Cablevision services and public access facilities in the central business district, and developing the office of the South Berkeley Development Corporation into a cable communications center.
 3. developing programming for public and/or government access parallel to information contained in the City's Revitalization Exchange.
 4. requiring Bay Cablevision to participate in the First Source program.
 5. advertising by Berkeley businesses in the "local avails" offered by the satellite networks, and in programming delivered throughout the East Bay over the Bay Area Regional Interconnect.
 6. providing video distribution for Vista Community College, the Chamber of Commerce or other organizations to provide contract education to local firms and small businesses.
 7. providing a broadband communications network for a new system of telework centers that will reduce journey to work transportation by residents and provide the infrastructure for job trainees and one person businesses.
- B. The arts community has needs for and interests in cable television. Due to the lack of a Berkeley daily newspaper, most artists and arts organizations need communications to notify the public of their schedule of performances, showings and so forth. In some cases, cable should be used to actually deliver live or video taped performances to local residents. Bay Cablevision should make the pay-per-view billing apparatus of the system available so that sold out performances or others of special value can be used to generate income.
- C. Individuals and local organizations have needs for and interests in human and social service delivery. As in other communities of interest, dozens of organizations need to use cable for outreach communications, delivery of certain services, coordination with other organizations and consensus building.

Other cable related human service delivery needs include:

1. providing a distribution channel that will link the video resources of Alta Bates/Herrick Hospital to residents, particularly to encourage wellness, outpatient treatment, and provide medical information to seniors.
2. providing convenient opportunities for continuing education for human and social service professionals by making courses available via cable in the work place and at home for Berkeley residents.
3. delivering some services at or close to home in a neighborhood center for people who are not fully mobile due to age, disability, language or income.
4. promoting Bay Cablevision's discounts for seniors or others.
5. requiring closed captioning on local programs and making public access facilities friendly for those with disabilities.
6. developing programs for skills training, nutrition education, human service referrals and so forth for individuals living in shelters, group residences, or transitional houses.

III. FINDINGS: EDUCATION

There is interest in cable use by educational institutions by both the community members participating in the public workshop and survey, and by the educational institutions themselves. Representatives from UCB, Berkeley Unified School District, Vista and Peralta Colleges identified the following needs and interests:

- A. Communications are needed to facilitate more cooperation and resource sharing between the institutions. UCB could provide electronic access to its video conferencing room and Vista has a video collection that it could share with students at Berkeley High School.
- B. Communications are needed to facilitate more cooperation between the institutions on existing programs. For example, the special science classes for girls and minorities offered by Lawrence Hall of Science could be distributed over cable, and the UCB School of Education could use cable in its training program for Berkeley teachers.
- C. Communications are needed to expand existing programs, for curriculum development, staff training, and student education for example.
- D. BUSD needs cable to acquire low cost, effective teaching resources such as CSPAN and the Discovery Channel.

- E. Vista needs to use cable to expand its contract education program to better serve small and medium sized businesses and to provide training to City employees.
- F. UCB needs cable to share campus events with other educational institutions and with the community at large.

IV. FINDINGS: GOVERNMENT

Virtually every department of City government needs to use cable for outreach, service delivery, coordination with other departments and community organizations, and consensus communications.

The City has recently adopted a strategic plan for municipal information systems. Implicit to this plan is a municipal data network between all computer equipped City offices. The cable franchise can be used to acquire at least some portion of this required network.

Furthermore, a parallel strategic plan for video communications would involve the following cable related needs:

- A. Capital improvements to the municipal communications infrastructure such as wiring for the Council chambers.
- B. Municipal innovation creating a video communications capability inside City government.
- C. A video communications architecture in which particular buildings and rooms will be wired and equipped to originate and/or receive video.
- D. A "picture image" (like a data image) of Berkeley that will include easily retrievable images of the City's physical attributes, cultural diversity, municipal services and municipal decision making.

Specific examples of communications needs are included in the Technical Report for the following municipal departments: Recreation, Fire, Police, Library, City Clerk and others.

V. RECOMMENDATIONS

The following recommendations express the cable related facilities and services that would satisfy the community needs and interests identified above.

- A. PEG access channels

Three channels immediately (1 each for public, education and government) in addition to the Peralta channel. A minimum of six channels (in addition to the Peralta channel) after the system rebuild.

B. PEG access equipment and facilities

1. A central, fully equipped studio facility
2. A government production unit that includes three portable cameras and wiring for the Council chambers
3. Create a BUSD production studio to include three portable cameras and basic editing for students
4. Internal wiring in designated buildings. See the map included in the Technical Report

C. Network capacity and features

1. Rebuild the subscriber network in between two and four years
2. Develop an institutional network immediately. The I-Net should link the central business district, UCB campus, South Berkeley and west Berkeley.

D. Regional interconnection

At least one access channel should be interconnected immediately to systems in Richmond, El Cerrito, Hercules and any other future system controlled by Bay Cablevision.

E. Leased access channels

City should enforce the leased access provisions of the Act once the system has been rebuilt. Although no pricing demands can be made, the City should seek a low lease rate for educational and non-profit organizations.

F. Universal build

Cable service should be available to all interested businesses, institutions and residences.

G. PEG channels on lowest priced tier

PEG channels should be available on the lowest priced tier.

H. First Source

Bay Cablevision should sign a First Source agreement

I. Customer service standards

The new franchise agreement should include strict customer service standards and sanctions if they are not met.

J. Franchise transfer or sale

Agreement should specify who is liable for unmet commitments in case of sale or transfer of the franchise.

K. Letter of credit

The City may wish to require a letter of credit due to the leveraged condition of the system.

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SECTION V

OPTIONS FOR PEG MANAGEMENT AND FRANCHISE ENFORCEMENT

PEG MANAGEMENT OPTIONS

I. GENERAL FINDINGS:

Section IV recommends that the operator be required to set aside PEG access channels and to provide funding for access equipment and facilities. This Section discusses options for the management of these resources.

In considering the options:

1. Program policies for public access differ markedly from those for governmental and educational access.
2. Management responsibilities for PEG access can be assigned to more than one entity.
3. Management functions can be separated from production.

The recommendations are based on the following findings:

1. There is virtually no support for Bay Cablevision to manage public, educational or governmental access.
2. No existing organization seems to be a candidate for assuming management of public access.
3. The access facilities must be located in Berkeley.
4. Heavy demand for PEG access exist.
5. The resources to be available for access will be limited, and therefore, the management model should facilitate resource sharing and ensure equitable access by all user groups.

The options discussed include management by a nonprofit access center, a school, the City, and an educational consortium.

II. RECOMMENDATIONS:

1. **Establish a Nonprofit PEG Access Center** to coordinate the use of the PEG channels, to schedule the channels, to oversee playback, to ensure the equitable use of all facilities and equipment available for access, to conduct promotion and outreach for the channels, the organization, and for all programming.

2. **Establish Formal Mechanisms for Input** into the policies and procedures of the nonprofit by the public, educational and governmental users.
3. **The City government** should establish a mechanism to develop the government programming policies and priorities for the government channel(s) and to manage a limited amount of production equipment at City Hall. The City could also contract with the Nonprofit Access Center for additional equipment and editing facilities, training and staff support.
4. **An educational consortium** composed of Berkeley Unified School District, Vista Community College and UCB should be established to develop the policies and programming priorities for the educational channel(s). Each would be responsible for its own program production and could also contract with the Nonprofit Access Center for additional equipment and editing facilities, training and staff support.
5. **Planning Process for the Access Center** involving representatives from city government, educational institutions, community organizations, subscribers and residents of the City of Berkeley should be instituted to design and incorporate the nonprofit access corporation.
6. **City and Educational Consortium Planning** should occur simultaneously.
7. **Funding** for the nonprofit should include:
 - a. adequate facilities, equipment (to include maintenance and replacement over the life of the franchise) and channel capacity for PEG access provided by Bay Cablevision.
 - b. a grant from Bay Cablevision to provide support to the nonprofit access center.
 - c. the 5% franchise fee (or its equivalent from the general fund) to support the Nonprofit Access Center and for the operations of the PEG channels.

III. Municipal Options for Franchise Enforcement

The City needs to support its new franchise agreement with an adequate enforcement effort. The enforcement activities not only ensure delivery of the level of service in the franchise agreement, but they also create the record for use in a future franchise sale or renewal process.

The following activities are required:

1. Complaint processing and resolution
2. Franchise monitoring (including payments of fees, insurance certificates, and performance monitoring such as for telephone response time)
3. Administrative supervision
4. Annual report compilation
5. Technical monitoring of the cable plant

The City has the following staffing options for franchise enforcement:

1. Assign the duties to a staff member with other responsibilities
2. Assign the duties to a staff member dedicated to cable enforcement
3. Contract for outside professional services

The City must also decide which municipal department will manage cable enforcement efforts. This decision must be handled in the context of the commitment the City plans to make to enforcement, the plan for in-house municipal video production and the management of the municipal data and voice communication functions.

SECTION VI

COST OF THE COMMUNITY NEEDS RECOMMENDATIONS

Section 626 of the Act raises the concern for the cost of meeting the future cable related community needs and interests. There are two components to this concern. The first is the cost of meeting the needs. The second is the general affordability to Bay Cablevision of the level of investment required to pay the costs.

The analysis determined a high and low estimate for the needed community benefits. The following summarizes the **high** estimate for the benefits recommended:

PEG channels	\$450,000 (year 1) 405,000 (year 4)
PEG equipment/facilities	
Equipment	1,480,000 (year 1 & 2)
Facilities	350,000 (year 1 & 2)
Drops/wiring	9,300 (year 1)
I-Net	1,164,000 (year 1 & 2)
Regional interconnect	28,000 (year 2) 84,000 (year 4)
Universal build	861,000 (year 1 & 2)
Cash	400,000 (years 1,2,3,4)
Total	5,231,000

Rather than develop a number of computer runs with varying community benefit packages, the financial subcontractor used the financial models in a break-even analysis. In other words, the models were used to calculate the maximum amount of investment that could be made in non-commercial community benefits and still be affordable. Affordability is defined as a rate of return that exceeds the cost of capital.

Conservative assumptions regarding revenue growth were used. For example, 36% penetration by the year 2000 was used despite a national average penetration today of 56%.

According to these models and assumptions, Bay Cablevision can afford to make a \$15 million investment in community benefits.

Since the system rebuild has commercial value (excluding the PEG channels whose cost have been accounted for as community benefit), it need not be included under the cap of affordability.

Nevertheless, the estimated \$7.6 million cost of a system rebuild added to the maximum cost of community benefits totals only \$12.8 million.

According to this analysis, Bay Cablevision can afford to provide all of Berkeley's community benefits and rebuild the cable system within 4 years.

SECTION VII

STRATEGIC POLICY OPTIONS

Berkeley must make its policy decision regarding renewal of the cable television franchise while in the midst of significant, ongoing technological, regulatory and market changes. The purpose of this Section is to identify the most relevant changing conditions and provide policy options in the context of these changes.

A fundamental question facing City decision makers is the nature of the social meaning of cable desired in Berkeley. Cable has been primarily identified as a commercial video entertainment service.

However, cable can also affect the level of diversity in the local culture, entertainment revenues can be used to subsidize the communications functions of local institutions and community organizations, cable generates a small amount of revenue for the municipal government, cable is a component of the telecommunications infrastructure and brings unique capabilities to the City, cable brings a new responsibility to local government and cable may eventually provide price competition in the local market for data communications.

The trends in technology are toward much higher capacity systems with 100 to 150 channels predicted within 2 years. The trends in services are toward non-entertainment markets (such as data transmission) and customized on-demand services. The trends in regulations and markets are toward increasing competition between industries. This means, for example, that telephone companies may be allowed to carry video entertainment and cable companies may be encouraged to carry data and voice communications.

It is possible that a competitive environment may reduce the authority of the municipal cable franchise. Berkeley should evaluate its franchise options in light of the possibility of losing community benefits that are not built in to the hardware of the system (an I-Net is hardware, PEG access involves only a channel allocation).

The policy options include:

1. Renew the franchise
2. Encourage an overbuild from another cable operator
3. Purchase the system
4. Deny renewal
5. Encourage competition from a wireless system
6. Develop a commercial overbuild

Berkeley's decision should reflect the community's value of and long run need for communications.

EXECUTIVE SUMMARY REPORT
CABLE TELEVISION FRANCHISE EXPIRATION STUDY
CITY OF BERKELEY
April, 1991

INTRODUCTION

Berkeley's franchise with Bay Cablevision is due to expire in August, 1991. The City of Berkeley retained the Communication Support Corporation and its subcontractors (CSC) to conduct a number of technical studies and a community needs assessment in preparation for the negotiation for a new franchise. The purpose of CSC's work was to provide a range of information to help City officials, the Cable Task Force and interested citizens:

- A. understand the strategic importance of cable television, and
- B. evaluate the community's policy options.

This report summarizes CSC's findings and recommendations. Interested readers can find full details in the report: "Cable Television Assessment: City of Berkeley." Attention should be directed to Section II of the report which summarizes the priority issues, options and decision factors.

I. FRANCHISE RENEWAL OPTIONS

The Cable Communications Act of 1984 (referred to as the "Cable Act"), the federal law governing cable television, defines Berkeley's rights and powers with respect to Bay Cablevision. The Cable Act provides the parameters, but not specific guidelines, for the negotiations for a new franchise agreement for cable service for the City of Berkeley.

Section 626 of the Cable Act is particularly relevant, because it defines a formal renewal process. Since neither the City of Berkeley nor Bay Cablevision requested the formal process, Section 626 provides guidelines rather than strict rules.

Section 626 specifies four criteria for renewal and they are paraphrased below:

- A. **Compliance to franchise terms:** the cable operator must have substantially complied with the material terms of the existing franchise and with applicable law. The operator must have been give the opportunity to rectify past problems.
- B. **Service quality:** the quality of the operator's service must have been reasonable in light of community needs.

- C. **Capability to renew:** the operator must have financial, legal and technical ability to provide the services, facilities and equipment as set forth in the operator's renewal proposal.
- D. **Future community needs:** the operator's renewal proposal must be reasonable to meet the future cable related community needs and interests, taking into account the cost of meeting such needs and interests.

Any argument for denial of the renewal must satisfy at least one of the four criteria and must be well documented by the City. Because of these standards and a number of legal details, the Cable Act is said to contain a presumption of renewal. Furthermore, as a practical matter, any City attempting to deny a franchise must be prepared for a lengthy and expensive legal process.

Most community members participating in the CSC study were dissatisfied with a variety of aspects of Bay Cablevision's service (see Section IV for details). Many expressed interest in alternatives to renewal of the franchise.

In addressing the question of renewal alternatives, CSC examined Bay Cablevision's record relevant to criterion B. CSC's study found that Bay Cablevision's service varied from adequate to marginally adequate and inadequate (see Section III for details).

For example:

Adequate: current channel capacity on the subscriber network

Marginally Adequate: technical performance of the system, customer services

Inadequate: Public, education and government access, absence of a local service office

While most Berkeley consumers would not judge this performance acceptable, it most likely would not provide sufficient grounds for denial, particularly without a very extensive record documenting City requests for specific service improvements.

CSC rates the City of Berkeley's cable franchise policy options in the following order:

Option 1. Renew Bay Cablevision's franchise subject to two requirements:

- A. Include very strong customer service standards in the new franchise agreement -- and provide for a very strong franchise enforcement effort by the municipal government.
- B. Insist that Bay Cablevision meet the future cable related community needs and interests, taking into account the cost of meeting such needs and interests.

If this option fails, then either or both of 2 and 3 would provide the next best choice.

Option 2. Renew Bay Cablevision's franchise on the best terms that can be negotiated. If the best terms possible are significantly unsatisfactory, study the feasibility of developing a municipally owned, multi-purpose, broadband telecommunications system capable of carrying video entertainment programming as well as data and voice. Such a system would overbuild and compete with Bay Cablevision's system. This option may be a risky use of public capital.

Option 3. Renew as in option 2 and wait for competition from other cable vendors or, more likely, from competing video delivery systems. Source of competition could include direct broadcast satellite services or perhaps telephone company video services. Neither of these alternatives will be available for at least 1 to 2 years. Both these alternatives may have important negative aspects for the City.

Two other options were raised by community members. CSC does not recommend either. They are:

Option 4. Renew and have the City purchase the franchise from Bay Cablevision. This option is expensive and puts the City in the position of paying market price. Since the market value of a cable system is largely a function of its holding the franchise, the City would be paying for the value it created through the award of the franchise agreement.

Most importantly, our preliminary financial analysis indicates that municipal ownership works only if the City eventually sells the system to a private vendor or captures economies of scale by using the system as part of its telecommunications backbone. Without a significant upgrade, the current system is not suitable for such use.

Option 5. Deny the franchise and solicit competitive bids from other cable operators. Denial would surely involve a lengthy and expensive legal process. The City would make a better investment in option 2.

The City of Berkeley must make its cable renewal policy decision in the midst of significant ongoing technological, regulatory and market changes which are discussed in greater detail in Section VII of the Report. These policy options should be re-evaluated during the course of franchise negotiations.

II. OTHER PRIORITY ISSUES

In addition to the issues of the technical quality of the cable system, the lack of public, education and government access channels and facilities, customer service standards and alternatives to franchise renewal discussed in I. above, community members also identified three other priority issues:

A. Underground plant

Aerial cables are unsightly and most jurisdictions prefer placing them underground. Undergrounding cable, however costs about two to four times more than aerial plant.

The City should review its needs for underground plant and require Bay Cablevision to pay for the conversion as a condition of the franchise renewal.

B. Openness of the cable decision process

Some citizens were critical of the lack of public involvement in the negotiations for the existing franchise agreement. There is concern that the current process provide opportunity for all voices to be heard.

Options for community participation in the needs assessment process conducted by CSC are described in Section IV and in Appendix D in the full report. In addition, the Cable Television Task Force provides a vehicle for citizens to make presentations or to participate in discussions through its monthly meetings, and the Task Force can take an active role in educating the community.

The Berkeley City Council will provide additional opportunities for public comment on the renewal decisions.

C. Opportunities for franchise re-openers in response to changing conditions

In the new franchise the City may build in provisions which anticipate changes in service in case of franchise sale, technological changes in the cable industry, changes in the regulatory framework governing cable television or changes in the level of service provided to other East Bay communities. These provisions may include re-openers, penalties, and/or alternative regulatory powers for the City.

III. FUTURE CABLE RELATED NEEDS IN BERKELEY

Section 626 of the Cable Act, in essence, allows the City of Berkeley to require Bay Cablevision to meet its future cable related community needs and interests. And, the City may base its policy options (see I above) on the willingness of Bay Cablevision to meet those local needs and interests. Berkeley's future will be significantly affected by how well these cable related needs are met either by Bay Cablevision, the City, or some other vendor.

A. Cable Television and Community Communications

Since cable television has long been identified with video entertainment to the home, decision makers and citizens alike frequently fail to understand why cable television can be so important to the future of a community.

Cable television provides a high capacity, broadband communications link into subscribers' homes and into businesses, community centers and government buildings that are connected to the cable plant. Such a high capacity system can transport video for entertainment, teaching, or conferencing. It can also transport data at high speeds suitable for computer to computer communications.

Cable television can provide a delivery mechanism for video and data communications which can increase efficiency and reduce costs. For example:

1. substitute for some automobile travel and, therefore, reduce air pollution and, congestion and conserve oil.
2. distribute municipal information and give access to government meetings to citizens and, therefore, further democratic interests.
3. share resources and facilitate cooperation among governmental, educational and community institutions and, therefore, increase efficiency.
4. deliver education and vocational training directly to homes or to senior, recreation and community centers and therefore improve the skills of the local population.
5. distribute free or for fee performances by local artists and therefore maintain local cultural diversity while providing a new source of funding for the arts.
6. reduce the costs and improve the level of data communications among governmental, educational and other key agencies in the city.

With shrinking budgets, increasing air pollution, escalating importance of oil, increasing loss of youth to drugs and drop out, and high structural unemployment, Berkeley must find more effective use of communications immediately. Before the end of the 15 year franchise term, an adequate communications infrastructure and the effective use of communications will play a major role in determining which cities prosper and which become overwhelmed by economic and environmental conditions.

B. Public, Education and Government Needs

CSC conducted an extensive assessment of cable related community needs through informational meetings, interviews, planning sessions and a survey. Public, education and government needs are discussed in detail in Section IV. The conceptual framework for the study of needs is presented in Appendix D1.

The following are but a few concrete examples of how cable resources can be used to benefit the Berkeley community:

1. Public Access

- a. The Black Repertory Theatre and other arts organizations and artists could use public access to increase local public awareness of performances (showings, openings and exhibits) in order to increase attendance. They could use the addressable capability of the rebuilt cable system to cablecast live performances to an audience at home on a pay-per-view basis in order to increase their income.
- b. Alta Bates/Herrick Hospital could distribute its catalog of educational video tapes over public access to improve wellness and home health care among an aging population faced with rapidly increasing medical costs.
- c. The South Berkeley Community Development Corporation could cablecast meetings held in its offices, thereby increasing neighborhood awareness of its programs and enhancing its role as a communications center for the community.
- d. The CSBG and Youth At Risk groups could improve communications with the City, coordinate its work with the police department and provide training for local youth in video production.

2. Educational Access

- a. Unemployed industrial workers and children at risk of losing their futures as school drop-outs or drug addicts could receive vocational training and remedial education conveniently at home or at a nearby community center provided by Vista Community College or Berkeley Public School.
- b. Vista Community College could provide contract education to workers in their workplace using the addressable capability of the system and its extension into the central business district and into West Berkeley industrial area.

- c. UCB could use an educational channel to deliver the professional videoconferences received through the UCB satellite and deliver them to the entire educational community in Berkeley. Space limitations in UCB's videoconference room now limit outside participation. Cable distribution also eliminates the necessity to drive to and park at the campus.
- d. Peralta, Vista and UCB could use the recommended interconnection to the other East Bay cable systems to distribute instructional programming to subscribers in Richmond, Hercules and El Cerrito.

3. Government Access

- a. City Council meetings and meetings of the Planning Commission, Rent Control Board and other governmental agencies could cablecast live and replayed at convenient times so that all citizens could participate in the decisions made by elected and appointed representatives. These meetings and others with less community wide interest (such as ad hoc committees and task forces) could be video taped for public distribution through the library and could be accessed for review by absent committee members.
- b. The Rent Control Department could explain its administrative procedures and host a live call-in program to answer questions and, thereby, save significant person-hours spent answering repetitive questions.
- c. A calendar of events for the Recreation Department shown on the government channel could increase participation in recreation programs and reduce repetitive telephone requests for information. The Recreation Department could add video training courses to its programs for youth.
- d. The Sanitation Department could publicize its recycling and toxic waste collection program and, thereby, increase its effectiveness. Direct mail, City newsletters and leaflets now available are expensive and have limited effectiveness.

4. Institutional Cable Network (I-Net)

- a. An I-Net provides a high capacity broadband communication system which is separate from the consumer cable system. An I-Net which connects West Berkeley, South Berkeley, the central business district and the University would enable organizations on the I-Net to more easily share resources, improve coordination and save money. For example, an organization located in the central business district and needing space to grow could occupy additional sites located in the West or South, thereby channeling new development into the areas desired by the City and keeping the business in Berkeley.
- b. The City government could use the I-Net for computer communications between remote facilities and save money over the cost of leased telephone lines.
- c. The Fire Department could conduct video training exercises over the I-Net and eliminate the need to remove crews from service while attending courses at a central location.
- d. UCB, Vista and the Berkeley Public Schools could use the I-Net to facilitate teacher training, delivery of instruction and course development.
- e. The Real Alternatives Project and other Social Service agencies could conduct regular video conferences among its agency members to improve their coordination and resource sharing.

IV RECOMMENDED FRANCHISE REQUIREMENTS

Based on the future cable related community needs and interests discussed in the previous section, the following have been recommended:

A. Public, education and government access channels (PEG)

1. 3 channels immediately on the existing cable system (1 each for public, education and government) plus the Peralta channel.
2. 6 channels minimum on the rebuilt system, plus the Peralta channel.

B. PEG access equipment and facilities

1. a central PEG facility that provides a fully equipped studio for all users desiring a high level of production quality
2. A government production unit that includes 3 portable cameras and wiring for the Council chambers
3. an upgrade of the Berkeley Unified School District production studio to include 3 portable cameras and a basic editing unit
4. internal wiring for two way video in 50 government or community buildings
5. a mobile van with basic video production capabilities
6. twenty five to forty portable video conferencing units

C. Network capacity and features

1. system rebuild to at least a minimum 550 Mgh (or 83 channels) capacity within 4 years
2. addressable converters, upstream capability and hub architecture in the rebuilt system
3. institutional network (I-Net) to connect the central business district, UCB campus, West Berkeley industrial area and South Berkeley within 1 year or comparable capacity on the consumer network.

D. Regional interconnection

1. at least one channel dedicated to an East Bay PEG Network so that Berkeley, Richmond, El Cerrito, and Hercules can exchange PEG programming. The Bay Cablevision Programming Network currently provides that interconnection.

E. Leased access channels

1. negotiate special rates for educational and non-profit organizations to use the 10% of capacity which must be reserved for leased access under the Cable Act.

F. Universal build

1. all business and residences within Berkeley, including those in the central business district, who desire entertainment services, PEG access services, leased access programming or I-Net services should have access to the cable facilities

G. PEG access on lowest price tier

1. PEG access channels should remain available on the lowest priced tier offered by Bay Cablevision

H. First Source

1. Bay Cablevision should sign a First Source agreement if it has not already done so

I. Customer services standards

1. The new franchise agreement should include strict customer service standards and sanctions, including liquidated damages if they are not met (see Appendix C for recommended standards)

J. Franchise transfer or sale

1. In case of transfer or sale of the franchise agreement, the City should require the new owner to assume all unmet commitments or force Bay Cablevision to finance the commitments prior to transfer.

K. Letter of credit

1. Require an irrevocable letter of credit, redeemable in the event Bay Cablevision fails to comply with the franchise agreement

In addition to these franchise recommendations, the report also provides implementation recommendations (see Section V for a complete discussion).

L. A Non-profit PEG access corporation

1. Establish a non-profit access corporation to manage public and educational access and an educational consortium to program the educational access channels

M. Municipal franchise enforcement options

1. Ensure that the City implements effective franchise enforcement procedures.

V COSTS OF COMMUNITY BENEFITS AND BAY CABLEVISION'S ABILITY TO PAY

Section 626 of the Cable Act requires cities to consider the cost to the operator of satisfying the community's needs and interests.

Bay Cablevision purchased Berkeley's cable franchise from Telecommunications, Inc. (TCI) in 1987. Lenfest owns 52% of the parent to BC and TCI owns 48%. TCI has recently spun off Liberty Communications which will control TCI's interest in its programming services and certain cable systems, including Lenfest. The relationship between Bay Cablevision, Lenfest, TCI and Liberty along with the highly leveraged position of the system should make the City include in the franchise provisions to protect its interest in case of an early sale.

Cable television is capital intensive and it is not unusual for cable systems to be highly leveraged. Bay Cablevision may be an extreme case in that our financial analysis suggests that the balance sheet shows negative equity. That is, Lenfest's liabilities exceed its assets.

However, despite a penetration rate that is about half the national average, Bay Cablevision is a healthy system with a healthy cash flow. Its operating income is comparable to industry norms. Its operating margin (operating income divided by total revenue) is comparable to the industry average and is in the range projected by Lenfest in its 1987 request for a franchise transfer. Furthermore, if Lenfest were to sell the system today, it would likely realize a significant capital gain.

To consider the costs of satisfying the community needs, we developed a financial model of Bay Cablevision's operations. In this model we made conservative assumptions about revenues, such as growth in subscribers and increase in rates, and costs, such as cost of debt and income tax rate.

Based on the financial model and our assumptions, the level of investment in community benefits that Bay Cablevision could make and still achieve a return on investment that exceeded its cost of capital was calculated to be approximately \$15 million. To put this sum in perspective, at even a minuscule 1% per year increase in the penetration rate, the system will generate over \$72 million in gross revenues in 12 years and over \$100 million during the life of a 15 year franchise. A more rapid growth in penetration rate would, of course, yield significantly greater revenues.

High and low cost estimates were developed for each of the recommendations. The high cost estimate of these community benefits totalled \$5.2 million. The high cost estimate of a system rebuild was \$7.6 million. However, the rebuild should not be treated as a community benefit. The rebuild should be considered a normal investment in plant modernization, necessary to the evolution of Bay Cablevision's commercial services.

Therefore, the estimate of the cost of rebuilding the system and providing all community benefits totalled \$12.8 million, substantially less than the estimate of affordability.

Considering the cost of meeting community needs, Berkeley should get all of its needs met.

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SECTION I

PREPARING FOR RENEWAL OF BERKELEY'S CABLE COMMUNICATIONS FRANCHISE

I. INTRODUCTION

The franchise agreement between Bay Cablevision and the City of Berkeley is due to expire in August 1991. The City must now set the terms of renewal of the franchise with Bay Cablevision or find an alternative to renewal. The City of Berkeley retained the firm of Communications Support Corporation (CSC) in August 1989 to provide a variety of services which included a review of the cable operator and an assessment of Berkeley's cable related needs. The purpose was to gather information that would assist the City Council in its decisions. This report is the product of that effort.

The Cable Communications Policy Act of 1984 ("Cable Act") specifies a formal renewal process that, to apply, must be requested by either the City or the franchisee between 36 months and 30 months prior to the date of the expiration of the franchise. Neither the City of Berkeley nor Bay Cablevision requested the formal process. Therefore, the formal process does not apply in this case.

Nevertheless, Section 626 of the Cable Act specifies four criteria for a franchise renewal which serve as guidelines:

- A. The cable operator must have substantially complied with the material terms of the existing franchise and with applicable law.
- B. The quality of the operator's service must have been reasonable in light of community needs.
- C. The operator must have the financial, legal and technical ability to provide the services, facilities and equipment as set forth in the operator's renewal proposal.
- D. The operator's renewal proposal must be reasonable to meet the future cable related community needs and interests, taking into account the cost of meeting such needs and interest.

The purpose of this study is to provide information to assist the decision makers in the City of Berkeley to set the terms of renewal or in finding alternatives to renewal.

II. OBJECTIVES

The objectives of the study are to provide:

- A. An overview of the technical performance of the present system.
- B. An evaluation of Bay Cablevision's current and projected financial condition.

- C. An assessment of future cable related community needs.
- D. An assessment of future cable related educational needs.
- E. An assessment of future cable related municipal needs.
- F. An identification of future cable television options.
- G. A liaison to the Berkeley Cable Task Force and the City Council.
- H. An overview of the customer service operations.

III. OUTLINE OF REPORT

Section I Preparing for Renewal of Berkeley's Cable Franchise

This describes the legal context of the study, study objectives and the layout of the report.

Section II Summary: Priority Issues, Options and Decision Factors

This section combines the findings of Sections III through VII and identifies the priority issues and options and defined the factors that to be considered when chosing among the options.

Section III Bay Cablevision Performance Review

Section III provides a description of the various dimensions of the performance of Bay Cablevision at one particular point in time. This information serves as a baseline for future assessments. The subsections are:

- A. Introduction to Section III
- B. Financial Status of Bay Cablevision
- C. Technical Assessment of Bay Cablevision Plant
- D. Customer Service Practices
- E. Public, Education, and Government (PEG) Access Services

Section IV Public, Education and Government Needs Assessment

This section summarizes the results of an extensive community needs assessment process and describes the nature of the Berkeley community's future cable related communication needs. These needs are related to recommended requirements for the cable franchise.

Section V Municipal Administrative Options

This information is not included in the original scope of work. Nevertheless, CSC believed that part of Berkeley's renewal decisions include the issue of options for managing public, educational and governmental access once the resources have been acquired. Similarly, a stronger franchise agreement raises the issue of more effective franchise enforcement. The options and costs for various approaches to franchise enforcement are presented.

Section VI Impact of Community Needs on Financial Performance

Section VI identifies the potential costs of satisfying the community needs identified in Section IV. It also provides a calculated maximum "affordability" or "financial tolerance" for satisfying community needs under a set of future market assumptions, given Bay Cablevision's current financial condition (as described in Section III-B).

Section VII Strategic Policy Options

This discussion puts the franchise renewal decision in a long term perspective where federal regulations, technology, and market conditions will be significantly different. It describes the options available today to anticipate future changes.

SECTION II

REPORT SUMMARY:

PRIORITIES ISSUES, OPTIONS AND DECISION FACTORS

INTRODUCTION:

This section is based on the findings of the Sections III through V and summarizes:

- I. **The priority issues:** Throughout this study -- in consultation with City officials, Cable Task Force members, institutional representatives and cable consumers -- a number of issues have emerged as having the highest priority. This section summarizes those issues and makes reference to other places in the Report where the issues are addressed in more depth.
- II. **Options:** The options for resolving these issues are discussed.
- III. **Decision Factors:** The section closes with a set of factors that should be considered when choosing among the available options.

The purpose of this discussion is twofold: to draw attention to the most important findings of the research and to provide some parameters for the City's evaluation of the available options

Much of the purpose behind the municipal franchise requirements is to ensure that the private investment in cable plant addresses local needs. However, local cable subscribers will, through their monthly charges, ultimately pay for whatever investments Bay Cablevision makes. Therefore, the decision of the City to support or dismiss any of the options must factor in cost.

Costs are more fully explored in Section VI. Figures mentioned in this section are estimates only, based on the analytical models presented by the CSC financial advisor (Appendix A: Three Scenarios) and the experience of CSC members working in other jurisdictions. Actual costs are subject to a wide range of factors and vary widely.

I. PRIORITY ISSUES:

The priority issues are:

- A. Technical quality of the cable system
- B. Public, education and government access facilities
- C. Customer service standards
- D. Underground plant
- E. Openness of the cable decision process
- F. Alternatives to franchise renewal
- G. Franchise Re-Openers

A. Technical Quality of the Cable System

1. Signal Quality

Technical quality has two dimensions. The first is signal quality, experienced by consumers as picture and sound clarity. The CSC examination of the technical plant confirmed what consumers and City staff in charge of cable complaints believe -- the system needs maintenance. (See Section III-c for condition of the cable plant and Appendix B for the technical report)

There are two options for improving and maintaining signal quality.

- a. **Maintenance:** The first is to adopt technical standards which require the operator to perform an aggressive maintenance program, including selective replacement of components.

The Federal Communications Commission (FCC) currently establishes technical standards, which cannot be exceeded by individual cities. Therefore, franchise standards must reference the FCC. However, the FCC's technical standards are likely to change in the near future. Berkeley has the option of monitoring proposals for new technical standards through the National League of Cities or the League of California Cities. And, the City should consider franchise language that would allow the establishment of local standards should future law permit.

Standards are, however, a franchise enforcement issue. Given the age and condition of the Berkeley system, the City has the option of protecting consumers with an annual or semi-annual inspection of the cable plant. The cost of each inspection using a consulting engineer is approximately \$7,000 to \$10,000. A detailed analysis of Bay Cablevision's technical operating budget was not performed.

- b. **Rebuild of the Plant:** The second option for improving signal quality is through a rebuild of the plant. Bay Cablevision has undertaken a partial retrofit of parts of the system to expand capacity and to improve signal quality. However, more could be done if the economics support it. Some cable companies have increased the bandwidth of their plants to 550 MHZ (delivering 75 channels), and fiber optic deployment for trunk distribution is becoming an industry norm. Construction costs for this kind of rebuild are considerable, but maintenance costs for a new plant would decline.

Plant rebuild is a negotiable item in the franchise renewal. The length of the franchise affects the feasibility of requiring a rebuild. The operator needs a longer franchise term to recover the investment of an extensive rebuild. The City can ask Bay Cablevision to rebuild the system to a higher capacity by a particular date. For example, it can be triggered by certain events such as achieving a certain penetration rate, fully utilized PEG access channels or increased demand for leased access channels. Increased capacity, provided by a rebuild, is required for several of the options discussed below (ex., PEG channels)

2. System Capabilities

The capabilities of the system are the second dimension of technical quality. Historically, the most relevant capability of a cable system is its capacity. The current capacity of the Berkeley system is 54 channels, and it cannot be further expanded.

Increasingly, other capabilities such as addressability, two-way or interactive video, and high speed data transmission are also becoming relevant. The Berkeley system is not currently equipped with these features. Addressability could be cost-effectively added, because of its revenue generating potential through Pay Per View and decreased operational costs by cutting down on service calls.

Another capability issue involves the extent of the cable plant, that is, which parts of the city receive cable service. For example, Bay Cablevision does not now serve the central business district (cbd). Line extension could provide service to the cbd, although it would be expensive due to the relatively high cost of meeting underground requirements and the relatively low current demand for existing entertainment programming in that area. However, extension of the system into the cbd and other business areas could provide costs savings to the city for data communications, open up new revenue streams and are critical to the plans of Vista to offer continuing education to local businesses (See Section IV; see also the discussion on undergrounding below).

The major option to the retrofit opportunities described is a system rebuild. An addressable 550 MHz system would deliver about 80 video channels which could be split to provide the upstream capacity necessary for interactive video. Some of the capacity can be allocated to data. The plant could be built to serve all locations. Costs are discussed further in Section VI.

The Community Needs Report in Section IV mentions the idea of cable based broadband services including video, data and image transmission specifically for use by community institutions. These institutions are often located in commercial districts not typically served by cable television plant. (See the maps provided in Section IV.)

One way to serve these institutions is through a separate cable known as an institutional network (I-Net). Section IV discusses the public purposes served by an I-Net connecting the West Berkeley industrial area, the central business district, UCB campus and South Berkeley. A six to ten mile I-Net would connect those four locations and could cost as little as \$300,000 to \$500,000, depending on the route and terrain.

B. Public, Education and Government Access Facilities

PEG access involves at least 4 separate issues: channel allocations, facilities and equipment, mechanisms for managing the resources and funding.

1. Channel Allocations:

Since the passage of the Cable Act the trend is for cable systems in California to provide one channel each for PEG access (Local Government and Cable TV, Foundation for Community Service Cable TV, 1989). Berkeley currently has no PEG access channels although Bay Cablevision operates a local origination channel and Peralta Community College programs a channel distributed throughout the Bay Cablevision systems. Section IV describes the basis for the short term recommendation of three PEG channels and the long term allocation of six or more in addition to Peralta's channel.

The problem is that the 54 channel capacity of the cable system has been fully allocated. To provide three channels on the system will require removing three or combining six existing program services. The option is to rebuild the system to a higher capacity.

2. PEG Facilities And Equipment

PEG channels are the means of local video distribution while PEG facilities and equipment are the means of video production. Bay Cablevision provides no PEG facilities or equipment in Berkeley. Equipment used to be available in El Cerrito but participants in the study stated that this facility was ill equipped, not well maintained and difficult to use. This facility is now used as the company's LO studio. CSC research determined that some organizations in Berkeley privately own a variety of video equipment, but the majority of the organizations and individuals do not have access to production equipment.

The new franchise can require Bay Cablevision to develop PEG facilities in Berkeley immediately. The preliminary cost for developing a package of equipment specifically for municipal government, Berkeley Unified School District and the public and the tradeoffs between equipment packages is presented in Section VI.

3. Managing PEG Resources

Typically, public, education and government institutions develop separate mechanisms for managing access resources. Section VIIA discusses the alternatives for PEG access and recommends that the City Council establish an independent nonprofit access corporation.

City government has the choice of contracting with that non-profit for part of its video production needs, such as cablecasting Council meetings, or of managing its own utilization.

The local education institutions participating in our study were not interested in managing public access, but they strongly supported the formation of an educational consortia with educational programming produced independently by each organization or through contracts with the nonprofit access corporation. (See Sec. IV and Appendix G: "Cable and Education" for a discussion of educational consortia.)

The particular mechanisms for managing PEG resources are not part of the franchise negotiation with Bay Cablevision. Although the franchise ordinance may specify the agencies responsible for public, education and government, the decision is an independent Council policy.

4. PEG Operational Funding

Although channel capacity, production facilities and equipment may be provided by Bay Cablevision, operating costs are a function of the actual use of these resources and the management model(s) developed.

For example, a documentary on regional transportation problems with high production values and special effects may require \$10,000 a minute to produce. An electronic meeting between Community Development staff in City Hall and the Board of the South Berkeley Development Corporation could cost nothing but the time of two volunteers. Use determines cost.

Operational costs are affected by the management model(s). Multiple management entities may increase costs. An access center which trains the community who then produces the programming using their own labor is less expensive than a center that provides a professional level production unit that produces the access programming.

The City must evaluate what its own cable use is worth in terms of savings from other forms of communications (including staff time to answer repetitive questions over the telephone that can answered one time for a large group over cable), or in extending services by cablecast of Council and selected commission meetings.

The education institutions similarly have existing budgets against which cost effective assessments of cable use can be made.

Public access as a central organization has no similar funding stream. Individual organizations may make cost effective use of public access resources, but the nonprofit access corporation must be created and funded. The issues of continuing funding are discussed in Section V. A.

The options for providing operational funds for PEG access include a City grant (such as part of the franchise fee), a performance contract with the City for video production services, public donations and/or user fees. However, the latter two options should be examined as marginal revenue sources, for public donations and user fees have been neither reliable or substantial income in other communities. In a few communities the operator has agreed to contribute a voluntary grant to the nonprofit center. The operating budget for a Berkeley non-profit access corporation could range from \$125,000 to \$300,000, depending on scope of responsibilities.

The City receives a 3% franchise fee which goes into general fund plus a 2% fee which goes into a reserved undergrounding fund (approximately \$160,000 per year at current levels of cable system revenues). The theoretical purpose of the franchise fee is widely debated, varying between a form of rent paid by the cable operator for use of the public rights of way to compensation to the franchising authority for the cost of enforcement. Legally, there are no constraints on the use of franchise fees. An option is transfer the existing undergrounding fund to support startup costs for access, to increase the franchise fee to the 5% permitted by law and to dedicate part or all of the franchise fee for access operations.

C. Customer Service Standards

Customer service is a term that embraces a wide range of services. These include the time to answer a complaint call, the time to repair a problem, the convenience of the business office to pay bills or pickup and drop off of converter boxes and so forth.

The perception of most consumers participating in our study was that Bay Cablevision's customer services were substandard. Telephone access has been a particular problem in the past. A local business office is also needed.

The CSC snapshot review of customer service practices did not find the same degree of failure suggested by consumers participating in the study. The review found service to be minimally acceptable. One explanation for the discrepancy in findings may be that many

subscribers cited past problems (poor phone response) that Bay Cablevision has taken steps to rectify (ex., the new direct cueing telephone system) and temporary outages that accompanied the recent retrofit of the system. (See Section IIIC for a discussion and Appendix C for the complete field report.) The report clearly recommends improved customer service.

Part of the historical problem with customer service is the absence of standards in the franchise agreement. Without contractual requirements, the City can only urge Bay Cablevision to perform so as to minimize complaints.

The only option available is to include a strong set of customer service standards and specified sanctions for non compliance in the new franchise agreement. A proposed set of service standards is included as Appendix C.

Franchise requirements require franchise enforcement by the City. A range of enforcement activities and accompanying costs are described in Section VB.

New federal cable legislation in 1991 may establish national standards that would preempt local ordinances. Nevertheless, the new ordinance should not assume federal legislation will address such standards. Berkeley officials may want to inform congressional representatives about their concern for tough local consumer service requirements.

D. Underground Plant

Aerial utilities of all sorts are unsightly. Most jurisdictions prefer to place utilities including cable television underground, and undergrounding is an issue for the City of Berkeley, including UCB.

The problem is that underground plant tends to cost considerably more than aerial plant. Aerial costs range from \$25,000 per mile to \$45,000 per mile. If conduit currently exists, underground plant may cost only \$15,000 per mile. If a street cut is required, this becomes about \$60,000 per mile. If the terrain is difficult, such as in the hills, the cost could rise to \$100,000 per mile.

In terms of a 200 mile plant rebuild in Berkeley, an expensive aerial installation could cost \$9,000,000. The same plant built underground with 50 miles in the hills could cost \$14,000,000.

Undergrounding also creates significant, if temporary, disruption for the community during construction.

The City has been putting a 2% franchise fee into a reserve account to contribute to eventual undergrounding of cable plant. The City has the option of reviewing its needs for underground plant, and either requiring Bay Cablevision to pay itself for the conversion or using the reserve account to pay. If undergrounding is minimized or if Bay Cablevision will pay for it, the City could then use the reserve account to pay for its municipal access or to contribute to public access.

E. Openness of the Cable Decision Process

The opinion was expressed during our needs assessment that the public did not have adequate opportunity to make its needs known when the existing franchise agreement was developed. There is concern that the current process provide ample opportunity for all voices to be heard.

The opportunities for participation in the needs assessment process conducted by CSC are described in Section IV Appendix D. In addition, the monthly meetings of the Cable Television Task Force provide a vehicle for citizens to make presentations or to observe discussions.

The circulation of this study will help some citizens learn more about the cable television issues and options. Eventually the City Council will conduct a public hearing and adopt an ordinance.

F. Alternatives to Franchise Renewal

There are two basic alternatives to renewing the franchise with Bay Cablevision:

1. Franchise Denial:

As stated in Section I, the Cable Act specifies four criteria in the formal renewal process that a city can require a franchisee to satisfy. In the six years since passage of the Cable Act, only one franchise renewal has been denied. The case involved Morganton, North Carolina, which began with a denial in 1985 and took until 1990 to survive court tests.

2. Municipal Ownership:

The issue of municipal ownership was raised frequently during the study. Municipal ownership can occur in two ways.

- a. **Purchase System:** The first is for the City to purchase the system from Lenfest Communications. The CSC financial analyst examined this matter and at \$2,000 per subscriber, affordability can be guaranteed only by the eventual resale of the system. Resale defeats the purpose of municipal ownership. (See Appendix C Page 6). Another problem is paying fair market value for the purchase of an asset that the City itself created -- the franchise agreement.

- b. **Municipal Overbuild:** A second approach to municipal ownership is to renew the Bay Cablevision franchise but overbuild the older technology with a new municipal high capacity system. Research on overbuilds suggests that the two systems compete until one buys out the other. The City would potentially have an advantage with scope economies in that a portion of the system would carry internal municipal communications. Realistically, it is unlikely that Berkeley would risk a multi-million loan in the uncertain video entertainment market. These and other major options are identified and briefly discussed in Section VII.

Ultimately, the purpose of municipal ownership is to ensure that the technical, customer service and community benefit needs of the citizens of Berkeley are satisfied now and in the future. A franchise cannot ensure that as evidenced by history in Berkeley.

But the new franchise agreement does provide a number of options to Berkeley. The City can assert its needs for service, including increased capacity through a system rebuild. If Bay Cablevision refuses to agree to a rebuild, Berkeley can offer a shorter franchise period. The State of Hawaii has pursued this strategy.

The City also has the option of protecting itself in case the franchise is sold or transferred. The franchise agreement can require cash payment for all remaining community benefits or unfulfilled commitments before City approval of the transfer.

Other innovations are also emerging to allow cities to obtain cable resources at an affordable price. A cable operator in Minnesota recently allowed a city to bulk lease a number of channels for municipal, public and educational use. This innovation was described in the winter edition of NATO NEWS. The City should consult legal counsel for other strategies that can be included in the franchise agreement.

G. Franchise Re-Openers

The cable television industry currently faces a particularly turbulent future. New technologies, competing industries and changed regulations are all certain to emerge with a few years.

Berkeley can try to protect its interests by including a clause in the franchise agreement that would re-open negotiations in case of changed conditions. Conditions that might be used to re-open the agreement include a sale or transfer of the franchise to a new owner, significant upgrade of the cable systems in any East Bay city including Oakland, or significant advances in technology upgrades considered standard in other California cities.

Federal policy can be expected to produce some form of competition to the cable industry. To anticipate this occurrence, Berkeley should adopt franchise language that attempts to extend the customer service and community needs requirements to all providers of video entertainment, regardless of the technology used.

III. DECISION FACTORS

The Cable Act says essentially that a large capital investment in cable television plant should fit into the City's long range plan for satisfying its future communication needs. From video entertainment to high speed data transfer, Berkeley in the year 2000 will need to plan, acquire, develop, and use a range of communication systems.

The following factors summarize the conditions that could be considered when evaluating the options described for the high priority issues.

A. Existing Cable System

The system currently carries 54 channels which appears to be its maximum capacity. Signal quality varies due to a number of technical problems such as salt spray corrosion caused by past use of unjacketed cables. A relatively high level of continuing maintenance is required. In order to increase channel capacity, both the distribution plant and the headend will have to be rebuilt.

B. Lenfest Ownership

Lenfest Communications acquired 52% ownership of the system from TCI in 1987. TCI retains 48% ownership and the right of first refusal in any sale. Lenfest's ownership is highly leveraged, in fact, Lenfest owes more than the system is worth. The operating income from the system exceeds the average for the cable industry. Lenfest stands to make a substantial profit if the system is sold.

Lenfest Communications also owns other systems in the East Bay. These include Richmond, El Cerrito, Hercules, Oakland and Emeryville. In a recent renewal in Richmond, Lenfest agreed to provide only about the channel capacity currently existing in Berkeley. The public, education and government (PEG) access offered to Richmond are far below what we believe to be needed in Berkeley.

C. Existing PEG Access Facilities

Lenfest provides only one channel for public access and, in reality, this functions as a local origination channel (i.e., the private television station of Lenfest Communications) which serves four franchises. The nearest public access production facilities are located in El Cerrito. Peralta Community College programs one channels which is distributed to all of Bay Cablevision and 2 other systems; it is available only to students enrolled at Laney and to the Community College. There is no government access provided.

D. Existing Customer Service

Subscribers participating in our study strongly disapproved of virtually all dimensions of Bay Cablevision's service -- from phone answering to signal quality. Customer service in the snapshot inquiry was evaluated as minimally adequate. There is no business office located in Berkeley. There are no substantial customer service requirements or sanctions in the existing franchise agreement.

E. Public Cable Needs

Berkeley has a tradition of containing a wide range of diverse interests, known for the high degree of organization and community activism. These organizations representing human service providers, job development and training services, political interests, the environment, neighborhoods and the arts have a very high need to communicate with the public in general, with their members or clients, with each other and with all levels of government. Cable based video services are needed by these many diverse interest communities.

F. Educational Cable Needs

Through the efforts of this study, the University of California, Berkeley, Peralta and Vista Community Colleges and the Berkeley Unified School District have committed to a continuing planning effort to develop the uses for cable, to explore the sharing of resources and to cooperate in joint project development. All four institutions have experience with video production and UCB, Vista and Peralta are potentially sophisticated cable users. Peralta, for example, has used cable and microwave distribution to distribute programming for over 14 years.

G. Government Cable Needs

The interest in the local political process is extremely high in Berkeley. There are over 45 citizen commissions, boards, or advisories as well as the City Council itself, all of which hold public meetings that could be made accessible over cable television. Citizens need to be aware of the large number of services and programs coordinated by the municipal government. There is no local newspaper to provide this communication service.

H. Affordable Community Benefits

Based on modest penetration and rate increase assumptions, it appears that Bay Cablevision could afford to spend \$15,000,000 on community benefits while maintaining a good rate of return (see Section IIIB and Appendix A). Community benefits are those investments that do not have commercial value, although a complete system rebuild, costing about \$7,600,000, would be counted as a community benefit. Even if Bay Cablevision agrees to provide \$15,000,000 in community benefits, there are a number of difficult tradeoffs between PEG access facilities, a complete rebuild, undergrounding of the cable plant, an institutional network and so forth.

I. Potential Changes In Available Technology

The technology used by cable television companies is expected to change considerably in the next few years. Higher bandwidth transmission media including both fiber and high capacity coaxial cable, and signal compression electronics provide two independent paths to increased capacity. Fiber is becoming the industry accepted norm for trunk lines. An off-the-shelf 550 MHz system can deliver about 75 channels of video, and the trade press talks of a near term promise of 100 video channels or more by the mid 1990s.

J. Potential Changes In Federal Cable Regulation

The federal mood and technological promise suggest the video entertainment marketplace -- currently served by broadcast television, cable, and video tape rentals -- will soon become more competitive with direct broadcast satellites, multi-channel microwave systems and perhaps telephone companies entering the market. Of all those systems, only cable television is currently obligated to offer PEG access to meet local needs and to pay franchise fees to the city. The cable industry can be expected to ask for and receive a level playing field in order to fairly compete. Berkeley's needs for channel capacity and fees may have to find another source.

K. Potential Changes In The Telecommunications Marketplace

The era of competition will bring additional players into the video entertainment marketplace, as suggested above, but it will also encourage cable television operators to enter markets for other telecommunications products. Already Cox Cable has a field trial underway offering digital cellular telephone service using the cable plant as the network backbone. Local video conferencing and high speed data transmission have always been a potential but largely undeveloped market. Portland and Manhattan are two exceptions. Development elsewhere may soon occur.

L. Potential Challenges To The Berkeley Community

A number of factors in the East Bay, the Bay Area and society in general are combining to force adaptations in the normal way of doing business. Many of the challenges can be met with more available communication resources and more effective utilization of the communication resources available.

1. A recession has reduced already strapped municipal budgets while increasing the need for many municipal services. Cable can cost effectively distribute government information.
2. Regional air pollution restrictions will increasingly constrain local automobile use. Cable can provide communications to substitute for transportation.

3. Education, vocational training, in-service training, and so forth are essential to many individuals and communities in Berkeley, and are an important component of the City's long range economic prospects. Cable can provide a distribution channel for education to homes and work sites while reducing the need for travel.
4. Health care costs are escalating, the population is aging and an AIDs epidemic threatens to overwhelm the medical system. Cable be used to save money and increase effectiveness by distributing information about where to go for service or by carrying low cost video conferences between medical experts.
5. Many senior and physically disabled individuals live in Berkeley. Cable delivered education, social, medical and municipal services would help reduce their mobility handicap.

M. Potential Issues Of Social Equity

Competition is replacing regulation as the means of efficiently protecting the public interest in communications markets. The problem is that markets distribute service according to financial resources. The result is ghettos or homelessness in the housing market, jalopies or carlessness in the automobile market, high infant mortality in the market for prenatal medical care, and so forth. Berkeley's multitude of organizations, currently foreclosed from cable access, may find themselves more communications dependent and less able to acquire the needed service.

IV. RECOMMENDATION

Under current law, cities have little authority over telecommunications industries. Cities in California have authority over only the cable television industry. The telephone industry, cellular mobile telephones, direct broadcast satellites, microwave carriers, and metropolitan area network developers are regulated elsewhere.

It seems likely that as competition increases and clear distinctions between markets disappear, the authority of city governments over cable television may be withdrawn. In an upcoming telecommunications issues paper published by the League of California Cities, an argument is made that the best hope for cities to retain their power is to avoid creating an unlevel playing field.

Berkeley could attempt to protect its community benefits and franchise fees by extending to other telecommunications industries the fees, facilities and performance standards that apply to cable television. These standards should be embedded in some element of the general plan.

SECTION III A

REVIEW OF BAY CABLEVISION PERFORMANCE

INTRODUCTION

The renewal provisions of the 1984 Cable Act empower the City to review the performance of the cable operator under the current franchise agreement. The formal renewal procedure allows the City to consider the quality of the operator's service, including signal quality, response to consumer complaints and billing practices. The City may also ensure that the operator has the financial, legal and technical ability to provide the services, facilities and equipment needed by the community.

Even though Berkeley is not following a formal renewal proceeding, the performance of Bay Cablevision under the existing franchise agreement provides important background to the franchise renewal negotiations. As established in the contract with the City, CSC investigated the financial condition of Bay Cablevision, the condition of the existing cable plant and headend, Bay Cablevision's customer service record and the community benefits in the form of PEG access resources provided by Bay Cablevision.

The current financial condition of Bay Cablevision is important to the informal renewal process for two reasons. First, the City must ensure that BC has the financial means to provide the services, facilities and equipment needed by the community.

Fifteen years ago, this would have meant ensuring that the applicant had enough financial stature to qualify for a construction loan. But the days of mom and pop operators have long since disappeared. Most cable operators today are Fortune 1000 corporations. The question in the 1990s is whether the franchisee is not already over leveraged, its borrowing capacity spent on acquiring the system.

This is an especially important question in Berkeley since Bay Cablevision has owned the franchise for only three years. According to their financial records, the purchase price of the system was essentially borrowed.

Second, Berkeley must consider the cost of meeting community needs. The impact of the cost of satisfying community needs on financial performance is discussed in Section VI.

The technical analysis determines whether the cable system delivers adequate technical service to consumers. It identifies conditions that need to be corrected in order to comply with existing laws. It also provides an assessment of the need for a rebuild of the system, either to achieve better technical performance or to expand channel capacity.

The review of Bay Cablevision's customer service practices determines the particular areas that will require improvement in the future. Requirements may be written into the franchise agreements in some areas.

Finally, current support for public, education and government access can be compared to the present and future cable related needs of the community. While provision of relatively few resources may not constitute a franchise violation, it may suggest Bay Cablevision's disregard for the potential contribution that PEG access could make to the success of the cable system.

SECTION III-B

FINANCIAL STATUS

I. INTRODUCTION

The Cable Communications Policy Act of 1984 ("Cable Act") (Section 626) enables the City of Berkeley to consider the financial qualifications and capabilities of Bay Cablevision to provide services, facilities, and equipment at a reasonable level to meet current and future cable related needs and interest. These considerations address the profitability of Bay Cablevision, its treatment of expenses and its projected rate of return.

This section of the report address the financial condition of Bay Cablevision. It describes the procedures that CSC and its financial analyst, Jay Smith of the Portland office of Deloitte and Touche, conducted to evaluate Bay Cablevision, and summarizes the findings related to the company's historical financial status. Section V then addresses the question of whether Bay Cablevision's profitability is sufficient to allow Bay Cablevision to expand and improve its system and service during the term of the new franchise.

II. WORK SCOPE

CSC was retained by the City to:

- A. Obtain and review applicable cable system franchise ordinances or service contracts, as applicable.
- B. Request financial projections and historical financial and subscriber penetration data from Bay Cablevision.
- C. Evaluate the overall financial condition of Bay Cablevision, determine the return on investment (ROI) for the period of Lenfest Communications, Inc. ownership and compare it to industry norm.
- D. Evaluate the financial projections for reasonableness.
- E. Evaluate Lenfest's ability to finance various levels of improvements. (See Section VI)
- F. Incorporate the costs of meeting the community needs into the financial projects and determine the impact on ROI. (See Section VI)
- G. Balance needs, revenue assumptions, and ROI in order to determine a number of optional negotiating positions for the City. (See Section VI)

III. FINDINGS

A. CORPORATE OWNERSHIP

Bay Cablevision purchased Berkeley's cable franchise from Telecommunications, Inc. (TCI) in 1987. Bay Cablevision is owned and operated by Lencomm, Inc., a subsidiary of Lenfest Communications, Inc. (Lenfest). Lencomm purchased the system with capital borrowed from the parent corporation, Lenfest.

Lenfest is an enterprise with two owners: the Lenfest family which owns 52% and TCI which owns the remaining 48%. Lenfest controls 20 votes per share and TCI one vote per share. Therefore, TCI's involvement is primarily financial. However, TCI has the right of first refusal if Bay Cablevision were to sell the system. And, after 1995 Lenfest and TCI each have the right to demand the sale. Without considerable additional research it is impossible to know whether TCI or the Lenfest family provided the capital for the loan.

In January 1991 TCI announced in a press conference that its 48% share of Lenfest will be transferred to Liberty Communications (Liberty), which is a newly established holding company for several types of TCI assets not managed directly by TCI. These assets include other cable companies like Lenfest and several programming interests, including 50% ownership in Pacific Sports Network, 50% in American Movie Classics, 20% in Black Entertainment Television, and 30% in QVC shopping network. TCI's 48% share of Lenfest's 413,000 subscribers nationally represents less than 13% of Liberty's total cable properties. It is almost impossible to forecast the future relationship between Lenfest, Liberty and TCI.

According to the financial records, the purchase price of the system was essentially completely borrowed. In fact, the prior year's balance sheet showed negative equity. Bay Cablevision is highly leveraged.

B. BAY CABLEVISION FINANCIAL ANALYSIS

The following financial analysis is based upon data provided to Deloitte and Touche by Bay Cablevision. The data was used to estimate a number of financial projections, including:

1. The net present value of the Berkeley system
2. The current and future operating income and operating expenses
3. Future rate of return based on 1% growth in subscriber penetration.
4. Future rate of return based on 2% growth in subscribers.
5. Future rate of return based on 1% growth in subscribers with a \$2.00 basic rate increase in 1992.

The financial forecasting utilized analytical models developed by Deloitte and Touche. These models provide predictions of how a cable system might operate under different scenarios. It does this by serving as an analogy for the real operation. Using a series of equations and assumptions, most of which are based on local historical information, a cable financial model can be used to calculate revenues, capital expenditures, operating costs, net income, cash flow and rate of return.

See Appendix A. for the full financial report and the projections based on the above scenarios submitted by Jay Smith upon which the following findings are based.

The analyses applied six measures of financial vitality: internal rate of return, operating margin, return on investment, system value, debt to equity, and time-interest-earned ratio.

1. Rate of Return:

The Deloitte and Touche rate of return financial model weighed certain historical information provided by Lencomm and projected these over time using discounts for the "time-value of money." "Time-value of money" means that a dollar one year from today is worth less than a dollar today. This is not due not only to inflation but to the fact that the dollar today is capable of earning compounded interest during the period of the next year.

For example, if an investor invests \$1000 into a project that will yield 12% compounded annually. At the end of a year the \$1000 will be worth \$1120. Thus, if the investor were offered the choice of \$1000 today or \$1000 a year from now, the obvious choice could be to take the money today.

Cable operators typically apply an internal rate of return measure as a key indicator of the return on investment. The internal rate of return relates annual cash flows to annual outflows in a manner that incorporates the concept of time-value of money. The net in-flow or out-flow each year is discounted at a compounded rate that equates the net discounted cash flow over the life of the investment to zero. Equating future to present value is simply the reverse of compounding interest.

The projected rate of return for the Berkeley portion of the system was analyzed using the following formula to measure each historical year's cash flow for the period 1987-1989: Cash flow equals Revenues less Operating Expenses less Capital expenditures.

Assumptions related to the projected cash flows for 1990 through 2000 included:

- a. 1990 subscriber count: 12,062 (25 % of homes passed)
- b. 1990 system revenue totals: \$3,692,000
- c. 1990 operating expense totals: \$2,333,000
- d. 1990 weighted rate of basic: \$15.62
- e. 1990 weighted rate of pay service: \$10.54
- f. Lenfest's cost of debt (interest retirement): 11.5 %
- g. Annual rate adjustments to with rate of inflation
- h. Bay Cablevision's income tax rate: 34 %

Three revenue scenarios were examined:

- a. 1 % growth in penetration per year ending with a 36 % penetration in year 2000.
- b. 2 % growth in penetration per year ending with a 47 % penetration in year 2000.
- c. 1 % growth in penetration per year ending with 36 % penetration in year 2000 but assuming a \$2,000 basic rate increase in 1992.

Based on these assumptions the project internal rate of returns for the above three scenarios are:

- a. 21.56 %
- b. 24.45 %
- c. 22.58 %

These assumptions for growth are very conservative, given that the national average for cable penetration is now estimated at 56 % while Berkeley's penetration is 25 %.

2. Operating Margin:

Operating margin shows the relationship between a company's total revenues and the costs of goods sold. In this analysis, operating expenses are subtracted from revenues to determine operating income. This amount is then divided by the revenue figure to determine operating margin. The industry average for operating margin, according to most industry analysts, is 40 to 50 %. The operating margin for Bay Cablevision for the period 1987-1989 was approximately 46 %

3. Return on Investment:

Yet during the same period Bay Cablevision showed after tax losses. These losses are a result of rather significant non-operating costs attributable to costs not reflected in operating income. For example, using interpolation based on Lenfest historical records we were able to show that approximately \$258,000 in

management fees, \$93,000 in corporate general and administration, \$1,176,000 in depreciation and amortization, and \$1,582,000 in interest on advances from affiliates are allocated to Bay Cablevision. When compared to the industry norm for the same period, Bay Cablevision's return on investment is much lower, largely due to these other costs.

4. System Value:

The value of the Berkeley system now and at the end of each projection period was assessed. Residual value for 1990 is estimated at ten times cash flow. The company estimates market value for the system at \$2,100 per subscriber or \$25,330,200. This is approximately \$15,000,000 more than the price paid by Lenfest in 1987 (not considering time-values).

5. Debt to Equity:

The debt to equity ratio measures the percentage of total funds that have been provided to creditors compared to the current liabilities and all bonds. From the historical information collected by Jay Smith, Lencomm's 1989 balance sheet showed long term debt of \$353,159,495. It also showed shareholders' equity at \$11,369,959. Although this ratio appears infinitely negative, it has remained steady during periods of healthy cash flow, and, therefore, should not affect dramatically Lenfest's ability to perform under a new franchise agreement.

6. Time-Interest-Earned Ratio:

The time-interest-earned ratio is determined by dividing earnings before interest and taxes (i.e., operating income) by interest charges. The time-interest-earned ratio measures the extent to which earnings can decline or interest payments can increase before the company is unable to meet annual costs. Lencomm's figures for 1989 averaged 1.52%, approximating the industry average. However, we cannot trust this figure by itself, because we were not provided sufficient information to analyze Lencomm's principal repayments. Lenders often look at this measure before granting a loan. The company may find difficulty in securing future financing from banks, equipment manufacturers, and insurance companies given its ratio. Therefore, the City may wish to consider requesting letters of credit for any of the community benefit items it wishes to pursue prior to awarding the new franchise.

IV. SUMMARY

In conclusion, Lencomm appears high leveraged but able to maintain debt service and operating expenses from normally healthy cash flows. Management fees and corporate overhead appear higher than average, but these costs were not analyzed in this study. The project future indicates that Bay Cablevision will experience a modestly healthy internal rate of return of 21.5% to 24.5% under very conservative growth indicators. If Bay Cablevision's penetration was to approximate the national average, this rate of return would multiply dramatically. Sizeable capital gains would also be expected if Bay Cablevision were to be sold in the immediate future.

No analytical model or process is 100% fail proof. At best the process attempts to approximate what would happen under a given set of circumstance. Although the financial projections discussed above are on the conservative side, they do not anticipate management turnover, natural disasters, or radical changes in the economy. Similarly, the rapid advancements in technology may also change the entire efficiencies of our current models.

SECTION III-C

TECHNICAL ASSESSMENT OF PRESENT CABLE SERVICES

I. INTRODUCTION

The technical assessment of the Bay Cablevision system provides two types of information. First, the study describes the current level of technical performance. The Community Needs Assessment reported a significant level of dissatisfaction with signal quality and service reliability among those subscribers attending the public meeting or returning the survey form. The question is, will an objective study determine that service levels are inadequate? Are there violations of existing laws? Of course, the report is akin to a photo snapshot; the findings reflect conditions during the time interval the study was conducted.

Second, the study will assess the need for a rebuild of the system. What are the prospects for improving technical performance with the existing system? The Community Needs Assessment supports the need for more public, education and government access channels than are currently provided. What are the prospects for obtaining increased capacity without rebuilding all or part of the distribution plant?

These findings provide a guide to recommendations in Section VII. The entire technical report is included as Appendix B.

II. WORK SCOPE

CSC was commissioned to:

- A. Describe the present service within the City and the numbers of subscribers served.
- B. Describe the technical system design, capacity and condition of the existing cable plant.
- C. Describe the variety and quality of the service provided by Bay Cablevision, including picture quality, number of outages, converter box problems and service calls.
- D. Review and evaluate system operations, including plant and system maintenance and repair programs.

This information will be developed through a spot check of test locations, testing of the distribution plant and comparison with industry standards.

III. APPROACH TO TESTING

This report documents the conditions of the system at fifteen subscriber test point locations representing all portions of Bay Cablevision's plant. Findings from a 48 mile "drive-out" of a representative portion of BC's plant are also reported. The tests documented in this report were conducted between August 28 and 31, 1989.

IV. SCOPE OF INSPECTION

The following items were inspected:

- A. Signal quality elements:**
 - 1. Minimum video signal levels
 - 2. Picture distortions
- B. Outside plant construction issues:**
 - 1. Construction techniques
 - 2. CPUC General Orders 95 and 128
- C. Picture quality elements:**
 - 1. Picture distortions
 - 2. Verification of objective measurements
- D. Evaluation of headend systems:**
 - 1. Review of headend systems

Signal quality elements portray the true condition of the cable television system and highlight any current and/or developing technical problems in the outside plant.

Physical evaluation of cable television plant illuminates any construction and/or maintenance problems which may negatively affect a subscriber's picture quality in the future.

The California Public Utilities Commission (CPUC) regulates basic overhead and underground construction techniques. General Order 95 provides the basis for overhead line construction and minimum separations between different services (i.e., power, telephone, fire circuits, and cable). General Order 128 addresses underground cable construction and separation issues.

Subjective evaluation of the picture quality by a technical expert was used 1) to confirm the objective signal quality observations and measurements, and 2) to document other picture distortions which might not have been detected by the objective measurements.

The headend was inspected in order to establish the picture and signal quality elements used to objectively and subjectively quantify the level of degradation introduced by the amplification equipment on the outside plant.

Field inspections routinely utilize test equipment owned by the cable operator. This practice avoids any possible accusation by the operator that the tests were biased.

V. FINDINGS: TECHNICAL PERFORMANCE

See Appendix B for a complete discussion of the Findings.

The Bay Cablevision system within Berkeley uses a coaxial cable to transport entertainment programming from the headend to subscribers. It has a traditional design employing a single trunk and feeder which provides 54 video channels. The system appears to have been developed to its maximum capacity.

The majority of the system consists of aerial plant built on power and telephone poles. Several miles of underground cable serve portions of the community. Not all of the City has access to cable service. The most notable examples include the central business district, portions of the West Berkeley industrial area, and small areas in the east hills.

Some portions of the trunk and distribution systems were built using unjacketed coaxial cables. These cables are more susceptible to corrosion from San Francisco Bay salt spray. Bay Cablevision has been gradually replacing these unjacketed with jacketed cables.

In many cases, the "drop cable" used to connect the main line on the pole to the back of the television does not meet the California Public Utilities Commission requirements for height above ground (CPUC General Order 95). In some cases, Bay Cablevision's failure to meet the requirement stems from poor installation practices, while in others, the installers have done the best job possible given the local construction constraints. In any event, the current non-compliance with CPUC General Order 95 is an issue which we recommend be addressed in any franchise renewal to insure that future violations are not permitted.

The system's headend, located in West Berkeley, is minimally adequate. A lack of tower height makes pick-up of some San Francisco stations marginally unreliable. The tower at the headend isn't grounded and, therefore, is in violation of Article 810 of the National Electrical Code.

Bay Cablevision picks up Sacramento stations at Grizzly Peak east of downtown. The cable used to interconnect the east tower and the headend was faulty and severe picture problems were observed.

The underground plant in the system was in fair condition. There was an instance of improper construction techniques at one check point.

CSC notified the City and Bay Cablevision management of the following specific conditions that affect technical system performance and/or are code violations. CSC understands that Bay Cablevision has taken corrective action on some of these violations.

The problems on this list were recommended for immediate attention. :

- A. The headend pickup of off-air channels should be improved so as to increase off-air carrier to noise ratio.
- B. The tower should be grounded in accordance with the National Electrical Code.

- C. The antenna cables should be upgraded.
- D. All headend and antenna connectors should be wrench tightened.
- E. Weather seal boots should be used on all external headend antenna connectors.
- F. Bay Cablevision should develop a formal plan to identify and correct all General Order 95 discrepancies.
- G. Bay Cablevision should address picture problems noted in the full technical report (Appendix B.)
- H. Bay Cablevision should inspect the underground portion of its plant to insure that all connectors and ports are sealed to prevent water ingress.
- I. Unjacketed cable should be inspected for physical deterioration and replaced as needed.

In summary, the technical condition of the system is no more than adequate to its mission. The cable itself is the weakest component, primarily because of the lack of proper jacketing. Bay Cablevision must aggressively maintain this system in order to deliver a quality product. The City must insist on this level of maintenance and should verify compliance by periodic technical testing.

VI. FINDINGS: POTENTIAL PERFORMANCE OF EXISTING SYSTEM

If properly maintained, the existing system can continue to provide adequate service for many years to come. However, the community needs assessment requires an increase in channel capacity and new system capabilities such as two-way video. The existing system has recently been expanded to its technical limit. It cannot be reliably or cost-effectively increased further. Therefore, a rebuild will be required at some point in order to satisfy community needs. A rebuild will also promote system reliability and reduce the need for continuous short term repair.

A cable system designed to carry 83 channels (550 Mhz bandwidth) is becoming the current design standard. It is expected that 91 channel capacity (650 Mhz) will be standard within the next few years.

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SECTION III D
SUMMARY
BAY CABLEVISION CUSTOMER SERVICE APPRAISAL
CITY OF BERKELEY

This summary outlines the findings of the customer service assessment report submitted to the City of Berkeley on October 30 1989 by Communications Support Group ("CSC").

The complete Customer Service Appraisal Report may be found in Appendix C.

I. PURPOSE OF STUDY

The stated purpose of the customer service report was to assess the customer service records and practices of Bay Cablevision and issue comment and recommendations on such practices. Recommendations were made in areas where CSC noted deviations from current industry and franchise authority standards, and on issues which were identified in consumer complaints and comments.

Research and inspections conducted for the customer service report were accomplished through a series of on-site visits to the cable company. Key technical and operations staff of Bay Cablevision were interviewed for this purpose. Additional data was gathered through a review of the City's cable system records, interviews with members of the City staff, and follow-up research via telephone response calling and conversations.

II. AREAS OF REVIEW

The customer service assessment was divided into nine operational areas for review:

1. Office Organization and Staffing
2. Work Order Processing
3. Phone Service and After Hours Coverage
4. Service Call Ratios
5. Customer Complaints Filed at City Hall
6. Rates
7. Customer Surveys and Bill Stuffers
8. Policies for Subscriber Credits
9. Local Programming Activity

CSC also evaluated the method employed by the City in handling cable related customer complaints and made recommendations on methods to log, respond, and track such complaints.

In addition to the above, the City identified a number of matters for specific investigation:

1. Toll-free phone service to Bay Cablevision
2. Billing notices and due dates
3. Advance billing
4. Programming line-up changes associated with the failure to carry the Pacific Sports Network
5. Service interruptions
6. Signal problems associated with Channel 28
7. Consumer notification of the City's audits of Bay Cablevision and community needs assessment using text messages on Channel 28

III. FINDINGS

A complete discussion of findings may be found in Appendix D.

A. Office Organization and Staffing

The current franchise calls for a local business office or agent. However, Bay Cablevision has maintained its main office on MacDonald Street in Richmond with ancillary offices in El Cerrito and Hercules. The main office was recently moved further away to the Hilltop Mall.

In order to return converters, get new batteries for remote control devices or pay bills in person, residents must drive between 18 and 35 minutes in each direction to reach the cable service office.

The staffing structure for the Bay Cablevision system which serves the City of Berkeley was reviewed and compared with industry standards. Bay Cablevision's management structure was found to consist of a Customer Operations Manager, Business Manager, Chief Technician, Marketing Manager and Construction Supervisor. All upper personnel were under the direction of Mr. Malcolm Taylor, General Manager for the Richmond cluster.

The review of the management organization and system staffing structure appeared consistent with industry norms. Charts of such organization are presented in the customer service assessment report.

For non-management personnel Bay Cablevision has a staff ratio per subscriber consistent with industry standards. (One customer service representative for every 2,500 subscribers and one service technician for every 40 plant miles is an industry norm).

Installation of cable service was conducted by two outside contract firms. Bay Cablevision was making a greater effort to properly identify all contract personnel as affiliates of the company through standard uniform codes and proper vehicle identification.

B. Work Order Processing

With a few exceptions, Bay Cablevision's method of handling customer service calls and new installation requests were found to be within normal industry practices and appear adequate to meet the needs of Berkeley's cable subscribers.

Bay Cablevision utilizes an in-house computer system to process new installation and service call activities. The company uses a similar process to respond to consumer needs for both types of activities.

A review of the cable installation work order and subscriber agreement form was found to clearly list the terms and services provided by the company. However, the subscriber agreement was found to be deficient in disclosing a subscriber's right to request an input selector switch (A/B switch) for use in selecting between the subscriber's off-air antenna and Bay Cablevision's cable as required by Federal mandate. Similarly, Bay Cablevision's disclosure statement failed to offer similar information. Furthermore, the disclosure statement did not look like an official document and does not attract customer attention.

To increase the effectiveness of the disclosure statement the form should be printed on official Bay Cablevision letterhead and the envelope should identify the importance of the document. Both the disclosure statement and the subscriber agreement should be modified to reflect current FCC policy for A/B switch notification.

C. Office Hours/Phone System/Hours Coverage

The customer service appraisal report offers an in-depth analysis of Bay Cablevision's customer service office hours, automated phone system and the hours in which subscribers may contact the company.

The current franchise requires telephone availability between 9 a.m. and 5 p.m. seven days a week without the subscriber incurring added message or toll charges.

Walk-in and call-in availability hours were found to be within the recommended industry standards and within the required availability hours of the franchise agreement. During the period of our investigation, CSC was unable to identify any complaint from subscribers related to insufficiencies in Bay Cablevision's availability hours.

However, according to Malcolm Taylor a small percentage of Berkeley subscribers pay toll charges when contacting Bay Cablevision.

The report offers a review of Bay Cablevision's "automatic cueing" telephone system. This system, installed during the previous year, gives the cable operator the ability to process and monitor incoming calls, thus improving the telephone answering response to the system's needs.

Besides the sixteen incoming rotary lines attached to the system for its main customer service phone listing, four other direct lines are provided for administration and business office functions; two additional lines for installation and dispatch; and one direct line for marketing and local programming.

After-hours phone service is provided by answering machines and an independent answering service. The answering service is referred to by the automated phone message at the close of each business day.

As part of the customer service assessment, CSC contacted the company by telephone ten times a day for a three day period to document the company's telephone response times. Telephone response is a major customer service issue which is often a problem in clustered cable systems.

Bay Cablevision's company policy for telephone response to answer all incoming calls with a live customer service representative (CSR) within 60 seconds of entering the phone system for a specific department. At the time of the system review, such a goal would be considered above industry standards. Since that time, however, industry standards have increased to a 30 second wait period.

Analysis of Bay Cablevision's response to the random calls made revealed that the company had difficulty in meeting its own telephone response standards. Of the thirty calls attempted over the three day period, 23% were disconnected or abandoned after 5 minutes of waiting, 60% were answered within 60 or 30 seconds.

D. Service Call Ratios

The normal cable industry goal for managing customer service calls (number of times a technician is dispatched to the home) is to keep monthly service calls activity within a range of 3 or 4 for every 100 subscribers (or 3% - 4%). The customer service appraisal report analyzed Bay Cablevision's performance in this area through the review of company service call data between January 1, 1988 and September 30, 1989. From this data, the report reveals that Bay Cablevision's service call ratio is just over 4% per month.

For further analysis on the type and frequency of the service calls made by the Bay Cablevision system, CSC reviewed service records supplied by the company between the months of January 1988 to September 1989.

The findings of the service call analysis are charted in the customer service report. The results indicated that the biggest service problems stemmed from the following:

Problem	# of Cases
Bad "f" fittings (cable connectors)	1778
Disconnects in error	832
Customer education	355
Bad trap	281
Bad drop from pole to house	272
Amplifier failure	234
Set problems	221

Under this analysis, Bay Cablevision's F-fitting statistic is higher than preferred and they should be asked to explain what is being done to improve in this area. Furthermore, the report emphasizes that Bay Cablevision should be requested by the City to provide quarterly service call performance reports such as the one provided during our audit.

Additional analysis revealed that almost 19% of the truck trips to people's homes had to be rescheduled due to persons not being home at the time. Also, there were almost an equal amount of cases where technicians found the subscriber's service to be operating normally with no problems whatsoever. Both problems represent a productivity deficiency that usually can be rectified by making calls to the subscriber's homes early in the day to confirm the subscribers appointment and by the initiation of a subscriber education campaign to inform subscribers on coordinating their home VCR and television equipment with the cable converters supplied by the company.

D. Customer Complaints Filed At City Hall

The customer service appraisal study included a review of the subscriber complaint log kept in the Public Works Department at City Hall. Subscribers file complaints with the City when their service problems are not satisfactorily resolved or when they are unable to contact the company.

Previous City reports on customer complaints indicated that the most frequent problems experienced by subscribers included poor signal reception, missed service appointments, billing discrepancies and installation problems.

The customer service appraisal report compares customer complaints logged at the City during most of the months between April 1987 through September 1989. Over this time complaints had basically remained at a steady level. The statistical analysis revealed that the categories which received the most complaints were listed as being:

1. Installation
2. Technical problems
3. Customer service
4. Billing.

During 1987 and 1988, installation problem complaints comprised a significant amount of customer grievances to the City. The data suggest that this problem has subsided by at least 50% in 1989. Conversely, technical problem complaints have shown a significant increase during 1989 and comprise its largest category. The General Manager attributed most of this rise to the technical disruptions related to the rebuild.

Complaints about customer service also decreased over 1989, registering as one of the smallest categories for the year as compared to the largest for the previous year.

Billing complaints remained at a fairly high level over all three years of our review period. Short payment remittance period often was the cause of billing complaints to the City.

E. Rates

The customer service appraisal report analyzes the rates for service charged by Bay Cablevision. In comparison to cable television service rates in other communities and in review of the rate information generated by the General Accounting Office (GAO) of the Federal Government, it appears as if the rates charged by Bay Cablevision were slightly lower the averages found across California and the country.

F. Customer Survey/Bill Stuffers

The customer service appraisal reviews information provided by Bay Cablevision related to subscriber information, rate schedules, a viewership study and statistics from a local programming survey. Blank copies of these forms were attached to CSC's appraisal report. (See Appendix C page 27.)

G. Policies For Billing Subscriber Credits

An important issues raised by the City is that residents are not being given sufficient time to pay their bills.

The customer service appraisal report outlined Bay Cablevision's billing procedures which include a 10 day grace period beyond the due date prior to payments being considered to be late. Late payments are subject to a "late charge" of \$1.00. This charge was recently reduced from a previous charge of \$5.00.

CSC surveyed five other cable companies to identify their payment remittance periods were. The survey showed that Bay Cablevision's ten day grace period before a payment is considered late is shorter than those of the other systems investigated.

The customer service appraisal report analyzes the subscriber credit policies of Bay Cablevision. The findings indicated that their policy is consistent with policies of other California cable operators.

H. Local Programming Operations

The customer service appraisal report includes a cursory examination of Bay Cablevision's local programming operations. This information supplements the statements of need and recommendations for access addressed in Section IV: Community Needs Assessment.

IV. RECOMMENDATIONS

The following summarizes the recommendations related to the concerns identified by City staff.

A. Toll-Free Dialing:

As stated in CSC's letter sent to the City via fax on October 16, 1989, Malcolm Taylor and CSC discussed the case of Mr. Thompson concerning toll charges for dialing Bay Cable. Malcolm stated that although it is unlikely that Bay Cable would invest in an 800 (Wats) line, Bay Cable would be more than happy to credit Mr. Thompson

or any other subscriber for the toll charges when phoning their offices. Malcolm would like Mr. Thompson to submit a copy of his phone bill to Bay Cable along with a letter explaining the charges. Malcolm would credit Mr. Thompson's cable service.

Due to the burden of contacting the company and the cost associated with mailing and copying documents, Bay Cable should again reconsider adding a 800 toll free number or establish a local call forwarding number. The call forwarding number would entail the establishment of a few local phone lines at a remote location which would automatically forward all incoming calls to the appropriate location.

B. Text Announcements on Channel 28:

Malcolm Taylor indicated full support to allow the City to place text messages related to the City's audits of Bay Cable, provided the City would provide copies of subscriber's comments so that Bay Cable could benefit from the sampling. He has no problems having comments from subscribers going directly to the City provided copies be sent along to Bay Cable.

As we discussed in our meeting with City staff on Friday, October 6th, CSC recommends that the messages instruct subscribers to submit comments in writing to Jeff Baker, City of Berkeley. An example message may read as follows:

P.1

YOUR INPUT IS NEEDED

The City of Berkeley is interested in knowing how you feel about the services of Bay Cablevision.

P.2

The City is conducting a comprehensive audit of Bay Cablevision as well as assessing our community's needs related to cable television.

P.3

Please send your comments to
City of Berkeley Cable TV Task Force
c/o Jeff Baker, Department of Public Works
1326 Allston, Berkeley, CA 94702

C. Advance Billing:

Bay Cablevision's practice related to billing is not unlike many cable companies. Every cable company we spoke with bills their subscribers one month in advance. They do this to prevent theft of service. However, we believe that not enough time is allowed between the date the bills are mailed and when the bills are due. Bay Cablevision indicated that it is planning to add another billing cycle. As part of this effort, the City of Berkeley should request that Bay Cable allow 30 days from billing date to payment date. Payment should not be considered late until 30 days after the billing date.

D. Programming line-ups:

Recent complaints received by the City related to Bay Cablevision's programming line-up (e.g. failure to carry Pacific Sports Network) are difficult to resolve. Under the Cable Act, the city cannot regulate the types of channels that a cable company provides its residents. It can however review the effects on the company's "mix" of programming when channel line-up changes occur. In a review of the files at both City Hall and at Bay Cablevision, programming related complaints were some of the least frequently received. However, this doesn't mean that those pertaining to a specific channel such as Pacific Sports Network, should go unnoticed by the City.

We recommend that the City copy all letters in its files related to PSN and share them with Bay Cablevision. Malcolm Taylor should weigh this form of popular demand in establishing Bay Cablevision's corporate decisions related to programming. It would seem that PSN would be an appropriate addition to the channel line-up given its strong local appeal. We recommend these subscriber letters be transmitted along with a letters of support from key members of City staff and local elected officials who share this viewpoint.

E. Service complaints:

We recommend that both the City and Bay Cablevision provide one another monthly reports which summarize subscriber complaints and service activity. Such communications will improve the response to service problems logged at City Hall, and it will provide the City with a glimpse of what the company is doing to rectify these problems. Monthly reports from Bay Cablevision should be generated by their computer and include information similar to that provided during CSC's audits (See Section 4.4 page 19).

F. Signal Problems Associated with Channel 28.

We observed no signal irregularities on the day that we visited Bay Cable. We suggest that the City continue to include this intermittent problem as a regular item for discussion with Bay Cablevision staff at monthly task force meetings.

G. Bay Cablevision's Customer Disclosure Statement

The City should require that the Disclosure Statement be reprinted in official company letter head and delivered to the subscriber at the time of installation in an envelop that reads "important disclosure information enclosed -- please read before signing subscriber agreement." We also recommend that both the disclosure statement and the subscriber agreement be modified to reflect current FCC policy for A/B switch notification.

H. Other Consumer Notification:

The City should require Bay Cablevision to undertake the following:

1. Send a letter to all subscribers outlining Bay Cablevision's billing and credit policies.
2. Post in the lobby of the Richmond and El Cerrito offices its policies related to A/B switches and customer credits.
3. Increase its consumer education regarding scheduling service calls, trouble shooting and VCR and converter operation.

I. Service Calls:

Service calls should be scheduled for mornings or afternoons. All customers should be called early in the day to remind them of the scheduled service call.

J. City Notification to Subscribers:

The City should provide information to cable subscribers concerning the City's regulatory role.

K. Single City Cable Liaison for the Public:

All correspondence and complaints received at City Hall should be directed to one point of contact. We recommend that this point be Mr. Jeff Baker's office in the Department of Public Works. A single "master file" system should be created and stored chronologically by fiscal year. Information and statistics should be compiled monthly and written into reports on an annual basis. As part of these records, Bay Cable should be requested by the City to provide quarterly service call performance reports. Such reports should include data on the length of time needed to fulfill requests and correct problems after the initial call. Telephone response time reports should also be included with this information.

L. Consumer Protection Standards:

Finally, the City should ask its legal adviser to provide the appropriate consumer protections for the new franchise.

Since the delivery of the Customer Service Appraisal Report, a number of customer service related changes have been implemented though state law and under new customer service recommendations of the National Cable Television Association. The following recommendations incorporate these new customer service items.

1. Respond to and resolve customer service calls within a 24 hour time period 7 days a week. Minor problems not affecting all channels may be resolved within 48 hour
2. Offer a minimum four hour scheduling window for all service related activities.
3. Offer credit to subscribers automatically for outages over 24 hours or upon the request of a subscriber for outages during a major portion of subscriber's daily viewing time.
4. Telephone response time with live company representative within thirty (30) seconds.
5. Office contact hours for billing and installation at a minimum of 8 hours a day M-F and 4 hours on Saturday. Complaint and problem calls and service appointments to be handled at a minimum of 60 hours per week.
6. 24 hour emergency repairs including weekends and holidays.
7. Telephone answering capability 24 hours a day with live representative providing at least emergency referral information.
8. Annually provide all subscribers with information on all services and fees of the company.
9. Distribute input selector (A/B) switch information to all subscribers in addition to Federal requirements for notification. Such information shall also be posted in the customer walk-in offices.
10. Annual privacy information distribution to all subscribers stating possible uses by the cable company of subscribers' names and addresses. Reporting shall be consistent with federal law.

11. Annually provide information on company identification including telephone numbers and address to all subscribers.
12. Annually provide information on parental control devices to all subscribers.
13. Nondiscrimination of fees and services in service area.
14. Provide 30 day advanced notice to Grantor and all subscribers prior to rate increases.
15. Residents to be afforded three day right to rescind installation orders.
16. Photo identification to be prominently worn by all field service personnel and contractors. All service vehicles including contract vehicles to be properly identifiable.
17. Grantee shall provide written notice prior to entry of residence.
18. Written notice must be delivered to customers prior to the disconnection of service.
19. Prompt removal of residential based equipment by company upon service termination.
20. Customer telephone calls to company must cost no more than local area telephone calls.

V. OTHER ITEMS:

Bay Cablevision currently does not have a contact person to whom franchise fee payments are made. We recommend that Bay Cablevision send any and all payments to the attention of the City's Finance Director. According to a letter sent from Mr. Lee Hightower, City of Berkeley, Bay Cablevision may have overpaid its previous franchise fees by a small amount. Bay Cablevision's Business Manager, Kahlil Habeeb, is not sure how the City calculated this overpayment. Someone from the City's finance office should contact Mr. Habeeb to explain Mr. Hightower's calculations.

SECTION III E

CURRENT STATUS OF PUBLIC, EDUCATION, AND GOVERNMENT ACCESS

This section of the report describes the current support provided by Bay Cablevision for PEG equipment, facilities and channels.

A. PUBLIC ACCESS

There are no public access production facilities in the City of Berkeley. The closest approximation to public access is a studio located in El Cerrito which was formerly used by Bay Cablevision as a production site for "local origination." Local origination is equivalent to a single television channel operated by and for Bay Cablevision.

At the time of our survey, Bay Cablevision had assigned 1.25 people to the El Cerrito operation -- 1 full time technician and a quarter time manager. The equipment available was judged to be inadequate for producing professional quality programs. It is old, much of it in disrepair. There is no usable field production equipment. Only 3/4 inch editing equipment is available so that 1/2 inch video must be transferred to 3/4 inch for editing. There are no classes offered in video production. There is no outreach program.

Channel 28 (now channel 8), the Bay Cablevision Programming Network (BCPN) was referred to as a public access channel but it is now used as the company's local origination channel. Bay Cablevision makes the programming decisions and provides most of the programming itself. BCPN can be seen in Berkeley, El Cerrito, Richmond, and Hercules.

In contrast, in the 1988 renewal in Richmond the franchise requires one public access channel, two for municipal programming (one of which is dedicated to internal city applications) and two for educational programming (one for the school district, one for Contra Costa College) (6 downstream and 2 upstream - to be phased in based on use.).

B. EDUCATIONAL ACCESS

Bay Cablevision carries the channel programmed by Peralta Community College. There are no operator provided production facilities nor equipment dedicated to educational institutions.

C. MUNICIPAL ACCESS

There are no operator provided production facilities nor equipment provided to the municipal government. There is no channel available to carry municipal programming.

SECTION IV

CABLE RELATED NEEDS ASSESSMENT

I. WORK SCOPE

The CSC Team proposed the following process to assess Berkeley's cable related needs:

A. Community Needs Assessment

1. Conduct preliminary research using City documents, meetings with City staff and the Cable Task Force, etc..
2. Conduct an introductory public meeting.
3. Conduct planning workshops with some communities of interest.
4. Conduct interviews with key members of other communities of interests.
5. Conduct a second public meeting, if appropriate.

B. Educational Needs Assessment

1. Meet with representatives of the major educational institutions in Berkeley to assess needs.

C. Municipal Needs Assessment

1. Review departmental mission statements and program budgets
2. Meet with City Manager, senior staff, department heads and other key City staff

II. NEEDS ASSESSMENT METHODOLOGY

For a complete discussion of definitions and concepts underlying the methodology please refer to Appendix D-1 "Definitions and Concepts."

The CSC Team conducted the following activities:

- A. **Document Review:** reviewed City policy documents, staff reports and newsletters (see Appendix D-2) and met with the Cable Task Force and key City staff. The purpose was to gain a sense of the current and emerging public policy issues, municipal goals and program responses and to identify the potential community participants in the assessment process (see Appendix D-3 for the list of community participants identified by the Task Force).

- B. Outreach:** For the community workshop Bay Cablevision mailed a bill stuffer to over 12,000 subscribers (which, due to cable company error, was sent out very late). A letter of invitations was also mailed to over 900 individuals and/or organizations, using more than a dozen mailing lists donated by the City, Task Force members and other community organizations.

Had a full page feature in the March 1990 TV Host, had feature article in the May 18, 1990 East Bay Express and three in the Berkeley Voice (March 28, April 5 and April 12, 1990) plus a front page article in the City of Berkeley Spring Report. Placed an article in the April 1990 Council of Neighborhood Association's newsletter and sent press releases to other organization's newsletters. Was interviewed on KPFA's "The Morning Show" April 3, 1990. Made presentations at the Berkeley Arts Commission, Community Service Block Grants Group, At-Risk Youth Council, and the United Black Clergy of Berkeley. In addition, the PSA taped at the Community Workshop (below) was cablecast on BCPN.

(See Appendix D-4 for samples of all outreach efforts.)

- C. Community Workshop:** Conducted a public meeting on May 27, 1990 attended by approximately 120 Berkeley citizens and institutional representatives. To illustrate the accessibility of cable TV as an outreach tool, Mayor Loni Hancock participated in a demonstration of the taping of a public service announcement (PSA). The workshop packet also contained a PSA packet for community organizations.

The workshop presented information on the history of cable TV in Berkeley and the renewal process and guidelines, and solicited participants' comments on past cable service and future needs, including public, educational, and governmental access. Bay Cablevision provided the crew for the taping of the PSA; the rest of the workshop was taped for community viewing by East Bay Media Center and two members of the Cable TV Task Force. The meeting agenda and packet is included as Appendix D-5.

- D. Survey:** Developed a survey which was distributed at the community workshop, at all informational meetings, and to those requesting information. Seventy eight surveys were returned. See Appendix D-6 for a copy of the survey and D-7 for a tabulation of responses.
- E. Planning Workshops:** Conducted planning workshops with three communities of interest: education, youth at risk and community activists. In these planning workshops representatives from organizations sharing common mandates are given background on the franchising process and information on how comparable groups use cable TV. Then based on information gathered from prior interviews with group members, the participants identify their communication and cable related needs. The information gathered was more complete for these communities of interest, because the these workshops focussed on the specific needs and resources of the participants.

The educational community participated in the most extensive planning process. Interviews were held with each institutional representative in order to identify the appropriate representative and to establish an agenda that incorporated the interests of each institution. Two one half-day workshops were held. Participants have committed to another planning meeting as the renewal process progresses. (see Appendix D-6 for the Educational Report, agendas, and list of participants.)

The community activists and youth at risk representatives each met for a one half-day planning workshop following individual interviews. (See Appendix D-9 and D-10 for lists of participants.)

- F. **Interviews:** Conducted interviews with 61 public, education and government representatives from communities of interest involving economic development, arts and culture, education, human and social services, and public safety. The interviews provided information about communication processes and cable interests. The organizations' communication processes are a basis for inferring cable related needs. (See Appendix D-11 for a list of interviewees and the interview format.)
- G. **Community Memory:** Hosted a Community Forum with help from Community Memory Staff which included the history of the cable franchise in Berkeley, description of community programming from other cities, a glossary of terms as well as a section inviting individuals to put questions to the forum which the consultants responded. Approximately 425 people utilized the Forum.

III. LEGAL BASIS

Berkeley's authority to require the franchise agreement to reflect community needs is contained in the Cable Communications Act of 1984. According to the Act, the City of Berkeley can require that:

"the operator's [renewal] proposal is reasonable to meet the future community needs and interests, taking into account the cost of meeting such needs and interests."

Section 626, (c) (1) (D)

This requirement of the Act was meant to apply to those cable companies that elected to follow the formal renewal procedure defined in the Act. Although Bay Cablevision did not exercise its right to follow a formal procedure, we nevertheless recommend that the City base its negotiating position on present and future community needs and interests.

IV. FINDINGS: GENERAL

A. **Berkeley needs the kind of local communications that cable television makes possible:** Berkeley is characterized by a wide range of well organized, active communities of interest for whom communications are essential. (See Appendix D-1 for a further discussion of communications needs.) Yet, the electronic media market is dominated by San Francisco, there is no local daily newspaper, and there is no public and municipal access programming and very limited educational access programming.

B. **Consumers participating in the study were dissatisfied with Bay Cablevision's service.** The CSC Team found consistent dissatisfaction with service among consumers participating in the public meeting, submitting a survey form, writing a letter in lieu of a survey or participating in the Community Memory Cable TV Forum. For a summary of consumer comments see Appendix D-7.

From the public meeting the comments were consistently critical regarding customer service (especially poor phone response), pricing, billing, marketing abuses, repair and installation, technical quality and programming. Of particular concern was the absence of a Berkeley business office. Only four participants offered positive comments regarding overall service.

A similar pattern can be seen in the responses to the surveys and letters:

Negative Responses Service Area:

38 of 41	customer service (poor phone response time)
21 of 22	billing (short late billing period)
4 of 4	marketing (abuses; no notice of discount rates)
11 of 11	repair/installation (late/missed appointments)
28 of 32	programming (unsatisfactory mix; lack of access)
26 of 31	technical quality (poor audio/video reception)

Most users of Community Memory browsed the information sections. Of those leaving comments, none were directly applicable to Bay Cablevision service. However, the decidedly negative tone of the discussion reflects generally on the local experience with Bay Cablevision. The comments included such negative associations with cable television as "passive consumers," "filtered information," "self-serving commercial purposes," and "smashing the television rather than viewing it," reflecting considerable doubt that cable television could be used for community benefit. (See Appendix D-12.)

- C. **Organizations participating in the study generally had significant communication needs and interests.** The CSC Team found a wide range of communication needs and interests among members of community organizations submitting a survey form or completing an interview.

Of the 39 surveys listing an organization affiliation all reported using specific communication channels to involve or educate the public:

Number: Communication Channel:

10	performances
20	forums
13	radio and broadcast TV
12	lectures
26	workshops or classes
23	publications
16	"other"

Of the 78 survey respondents, most stated that they would like to use cable TV to improve their communications and service delivery. Specifically, the number proposing to use specific cable capabilities to deliver information to the community were:

Number: Cable Application:

56	community bulletin board
53	playback pre-recorded tapes
54	program with a guest or resource person
51	production training to produce a program

Of the 61 individuals interviewed, the number mentioning cable related uses in the following categories of communications needs were:

Number: Communication Needs:

61	outreach communications
32	service delivery communications
16	coordination communications

(see Appendix D-1 for a narrative description of the need categories and see Appendix D-16 for the source of data)

- D. **Organizations participating in the study were dissatisfied with Bay Cablevision's current level of PEG access service.** The CSC Team found no satisfaction with existing public access service among those who attended the public meeting, workshops, presentations or submitted surveys. For example, of the survey comments mentioning channel 28 (Bay Cable Programming Network), 11 of 11 were negative. Only 4 out of 64 respondents had ever utilized the El Cerrito public access studio, and those four commented on the poor equipment and other problems with use.

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The applicable comments made verbally at the public meeting include the following:

Need for a Berkeley based public access studio with durable equipment, particularly for editing

Inadequate investment of funding and support invested by Bay Cablevision in the current access studio

Existing video equipment is outdated and poorly maintained

- E. **There is an active video producing community with some minimal private resources that requires transmission opportunities and central public facilities.** The CSC Team found many organizations submitting a survey had managed to become involved in video communications despite the lack of Bay Cablevision's public access resources. Producers referenced access to their own equipment, that of friends or of organizations outside of Berkeley, private production services or of East Bay Media Center. From the surveys:

Number: Resources:

47	staff/volunteers had video production skills
29	had produced/commissioned a program or PSA
33	owned or had access to video cameras
27	owned or had access to video editing equipment

However, it should be noted that with the exception of the East Bay Media Center the production resources referenced are either not available to the general public or must be rented at commercial rates.

In summary, the interview questionnaire and other research supports the following general findings:

- A. The many and diverse groups and communities of interest in Berkeley have significant needs for PEG access services to make it possible for them to communicate effectively with the community and each other. This need is not presently being met by Cable. The need is particularly urgent because there is no daily community newspaper. The needs found in 1989-90 will grow over the life of the franchise, so that the franchise should ensure that in future years the number of PEG channels allocated.
- B. Because of the diversity of the Berkeley community, the management of the access resources and channels must be politically neutral.
- C. Program of ongoing education to support community use of cable television is needed.

V. FINDINGS: PUBLIC

To better understand the cable related needs of Berkeley the needs assessment process examined the communication needs of three sample communities of interest found in Berkeley. (See Appendix D-1: Concepts and Definitions.)

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A community of interest is an important concept to this study because it defines an existing pattern of communications. Simply put, a community of interest is a set of organizations and individuals who share a common purpose: promoting the arts, environment, health, etc.. The members of each community of interest has pre-existing communication patterns: newsletter, correspondence, meetings, phone calls, forums, etc.. Any given community of interest has four kinds of communications: outreach, service delivery, coordination, and consensus building. These communications needs then define the cable related needs of the community.

Using the interviews and planning workshops, the study analyzed three communities of interest: economic development, arts and culture and health and human services. It should be noted that this analysis could be applied to any other community of interest.

A. Economic Development Community: Cable television can be used to address economic development needs and interests. Many of economic challenges facing Berkeley in the 1990s could involve cable communications in some application.

1. Jobs must be found for workers left structurally unemployed by the sharp reduction in well paying semi-skilled manufacturing industries. Either new manufacturing firms must locate in the area or the workers must be retrained and placed in better paying jobs in a service industry. The inability to succeed at that goal threatens the ethnic and income diversity of Berkeley.
2. There are trade-offs between increased commercial development and traffic congestion, air pollution and other quality of life issues. Yet, Berkeley has lost businesses -- and their workers, retail sales formerly generated by the workers, and business taxes -- because of lack of space to grow.
3. South Berkeley needs and wishes commercial development compatible with existing residential neighborhoods. West Berkeley is increasingly a mixed commercial-residential area with expensive shops and restaurants as well as artists, service professionals and high and low tech companies.
4. Kids, particularly those in low income families, are dropping out of school, turning to drugs and generally losing their futures. They need to acquire job skills and participate in programs that provide support for avoiding drugs.

The City government is currently attacking each of these issues in a number of ways. The example studied for the needs assessment involves the youth sector of the Job Training And Placement Community.

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The Youth Employment Services (YES) is a program operated out of the City Department of Health and Human Services. YES contracts with the Berkeley Adult School, Asians for Job Opportunities, Veteran's Assistance Center, Inner City Services, Women's Employment Resource Center, and the Bay Area Urban League. Together these agencies form a community of interest.

There are many related communities of interest that are potential users of cable television resources. The RAP consortium is one. There are also approximately 10 organizations in the region that offer some form of technical assistance or vocational training, including East Bay Small Business Development Center and Vista College.

Funding for this community depends in part on attracting and processing candidates to a "positive termination." Increasing the effectiveness of the community and lowering its marginal costs of processing are in the public interest.

Cable can contribute to these goals by helping satisfy the community's communication needs. The following are examples.

Outreach communications make the public aware of the services available and recruits candidates. Simple cable bulletin boards or discussion programs can increase recruitment efficiency. These same methods can also be used to attract employers to the program.

Service delivery communications are necessary to complete the intake process, provide the best mix of vocational training and conduct case management. In some cases, distance education via video tape can save transportation time and cost and help with missed classes. Some classes can be conducted via live interactive video with the instructor in a central location and students located either at a job site or neighborhood facilities.

Live interactive video can also help case management efficiency by allowing YES counselors to periodically interview interns and their managers without leaving the office. YES personnel are spread thin, as YES is also one of 9 agency members of the community of interest defined by the Real Alternatives Project (RAP).

Coordination communications occur when the community members come together to meet twice a month. Live interactive video can be used when some members don't have time to attend but still want to participate, when visual material from a remote location is needed at the meeting, or when some members need to discuss a particular case face to face outside of the regular meeting.

Consensus communications occur when the community shares information about federal funding for the Job Training Partnership Act or contacts a congressional representative to lobby for continued funding. Cable could play a role in mobilizing past and present interns to lobby congress.

Several of the above applications involve electronic meetings. Electronic meetings, while largely an unknown phenomenon at the local level, should increase during the 1990s as street congestion and parking scarcity add valuable minutes to even short trips, and regional air pollution regulations severely restrict cold starts and vehicle miles travelled. These issues are discussed further under the Municipal Services heading below.

In addition to the communications of these job training and placement communities, the following are other cable based opportunities for addressing economic development needs.

1. **I-Net and Economic Development:** Berkeley is the home of a campus of one of the nations most prestigious institutions of scientific research, the University of California, which contributes to the economic life of the city in many ways. In particular, in recent years, university faculty, staff and students have developed a remarkable number of new high technology firms, among them Cetus, a major biotechnology firm, and more recently, Farallon Computing, founded in 1986, which developed from UCB's Macintosh User's Group. These spin-off companies have repeatedly outgrown the space or facilities available to them in Berkeley and have moved out of town to larger locations.

In one example, Farallon Computing, Inc. quickly outgrew its Berkeley facilities and relocated to Emeryville in December, 1989, despite its founder's preference for Berkeley (see MIS Week, April 4, 1990).

Berkeley has a limited number of sites for development in the central business district, wants to encourage certain kinds of development in South Berkeley and is managing the process of conversion from industrial to mixed commercial in West Berkeley.

It is possible for Berkeley to link those three areas with a broadband cable plant capable of transmitting full motion video, high speed data and graphic images. These capabilities would allow a growing business to stay in Berkeley by locating headquarters in the central business district and other operations in the South and/or the West. The parts can be integrated with telecommunications. In this way, growing firms could be accommodated and development goals in three districts of town could be met. Farallon may not have been a good candidate for such an experiment, but others who highly value proximity to the University might.

South Berkeley is anchored physically by the mixed use building at Adeline and Harmon and organizationally by the South Berkeley Neighborhood Development Corporation (SBDNC). Any I-Net that is developed should serve South Berkeley. The new building and the surrounding corridor may attract tenants who will increase the high value economic activity in the neighborhood.

This is a commercial application for an institutional cable network.

2. **Access and economic development:** The central business district and South Berkeley are two locations that have become subjects of public development policy. Without inviting high density development, the City wants to encourage the cbd as a focal point of day and night activity with substantial volumes of pedestrian traffic.

Although Bay Cablevision currently lacks a presence in Berkeley for either a service office or an access facility, both are likely outcomes of the franchise renewal. Either or both could be located in the cbd. Of course, a number of factors will be considered when and if the location decision is made. However, a television production facility open 14 hours a day, wherever it is eventually located, could be expected to employ people, attract walk-ins and bring linkages to other desirable activities such as restaurants or office and video supply retailing. It should also be conveniently located for public transit access.

The SBDNC is the center of several inter-related communities of interest. As a non-profit corporation, it has between 100 and 200 members with an elected board of directors. The public meetings and membership communications create communication needs that can be satisfied by cable television uses.

SBDNC is partially funded by the City's Office of Economic Development and functions at times like a remote city hall by providing government information and some municipal services such as intakes and assessments for the City's First Source program. Cable based video and data links to city hall would make that communication function more effective.

SBDNC is also something of a community information center already. It is a site for a Community Memory terminal (public access electronic mail). It heavily promotes employment opportunities available through the Youth Employment Services Program and is a member organization in the RAP community. This existing function suggests that a SBDNC would be a good site for low tech video origination and group viewing opportunities.

3. **Access Program Source:** The City's Office of Economic Development currently publishes the Revitalization Exchange, a monthly newspaper that carries news and features of significance to South and West neighborhoods. This includes information on YES opportunities, office space for lease, job listings, recycling, special refuse collection schedules, recreation programs, plan committee updates, zoning revisions, energy programs, rent adjustment methods, library services, block meetings, drug programs, school activities and a very broad events calendar. This paper should itself be turned into the equivalent of a weekly cable program or, given sufficient resources, a "revitalization network" available over public and/or government access channels several hours per week.
4. **First Source:** The First Source program should be extended to include Bay Cablevision. Assuming that some plant construction or upgrades will be necessary, the City might want to negotiate for training and/or jobs for residents. Similarly, Bay Cablevision may open a local customer service office in Berkeley and this too could be subject to the First Source program. Of course, many of the jobs created by the access management organization will be available to residents.
5. **Advertising:** Satellite networks delivered by cable systems make a certain number of minutes per hour available for the operator to sell to local advertisers (referred to as "local avails"). In addition, Bay Cablevision participates in the Bay Area Regional Interconnects which enables local cable systems to readily plan local ads regionally. It may serve a public purpose to provide special rates or technical assistance to businesses located in the cbd or South Berkeley or who have signed First Source agreements.
6. **Contract Education:** Well over half of Berkeley's businesses, about 2,000 firms, have 4 employees or less. Small businesses are often the long run future of a city. And owners/manager of small businesses tend to lack skills in management and in using telecommunications. Vista Community College is interested in developing management training materials for delivery over cable. The Chamber of Commerce might want to provide technical assistance to these businesses using the public access channels.
7. **Telework Centers:** Public access is a tradition in cable television that makes the means of video information production and distribution available at no charge to members of the public. Community Memory is a system that makes electronic mail and electronic bulletin boards available at no or low charge to members of the public.

The cable franchise renewal could be a good time to experiment with public access to "telework stations." This would be the practice of making the means of data/text information production and distribution available at no or low charge to selected members of the public and at commercial rates to the general public.

This concept addresses three problems and combines the solution into one facility platform. The problems are:

- a. the need to protect the environment by reducing the vehicle trips generated by Berkeley residents in the journey to work. Over 40% of the City's 50,000 or so resident-workers had a managerial or professional occupation in 1980 and are therefore clearly information workers who at least occasionally could work from a telework station instead of the normal office. Over half Berkeley's working population commuted to jobs outside of the City in 1980.
- b. the need to provide work stations for residents training to acquire computer based analysis and writing skills and provide placement for these individuals. Telework stations could serve as both training facility and free lance work facility as the City's job brokering could expand to attract a variety of information work opportunities. If the telework station were served by an I-Net, the City could offer student information services to any other businesses located along the I-Net.
- c. the need to provide infrastructure for under-capitalized entrepreneurs from writers to programmers who could develop successful local businesses or export products with access to the proper equipment. The graduates of training programs might also fit in this category.

In one form, the OED, a local college and YES would joint venture in development of a telework center. Some work stations would be available to those in category 1) at commercial rates, others to those in 2) at no charge during the period of training and internship, and others to those in 3) at a less than commercial rate.

If a telework center were developed in the air rights over the BART station near Adeline and Alcatraz, it would provide demand for commercial services in South Berkeley and also attract residents of nearby cities via the regional transportation system to its commercial component.

The concept does not require a cable institutional network, since the communications could be carried over leased phone lines, but the availability of an I-Net and/or a demonstration project grant from the franchisee would decrease costs in the long run. Should an I-Net be available this would be a ready application. The need for telework stations is clearly more speculative than other findings.

- B. **Arts Community:** Cable TV can be used to address needs and interests associated with arts and culture.

The Arts Community is a loosely organized cluster of arts institutions, individual artists, institutions interested in community arts (such as Berkeley Unified School District), facility owners (including UCB's campus facilities, Fantasy Studios for film makers, and Cody's and Black Oaks Books where poetry readings are held), arts patrons (including City, County and private foundations) and arts consumers.

Although the data are far out of date, it is still worth noting that artist was the occupation most frequently listed by Berkeley residents after post-secondary teachers and librarians in the 1980 census. This suggests the possible importance of the arts community to the health of the local economy.

Our research reflects the perspective of the arts institutions and performance facilities. Those interviewed believed that the public tends to be unaware of the arts available in Berkeley. For them, the most pressing problem is to attract capacity audiences for scheduled performances or greater traffic to gallery events. This translates into the need for outreach communications.

Lack of adequate local outreach has financial implications both in terms of lower box office for some events and higher promotional costs for others. The absence of a Berkeley daily newspaper significantly handicaps local arts groups trying to either advertise a specific event or generally achieve higher visibility through feature stories or news reports. In some cases, expensive advertisements in regional daily papers are the only resort, even when the performance may have only local appeal.

Outreach communications should include an arts events calendar as well as studio discussion/interview shows and some on-site features of artists at work. This will require channel capacity, studio facilities and mobile equipment.

Service Delivery: Communications for service delivery to Berkeley households is also needed. Both the City of Berkeley and the County of Alameda have historically provided funding for the arts. To the extent that local arts groups can approach a self sustaining status, less public subsidy will be required.

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Service delivery communications can take several forms. Public access cablecasts of actual performances could break down the barriers that some members of the public have toward new experiences by allowing potential audience members to sample the experience in their homes. In other cases, a pay-per-view arrangement would allow some groups to reach a larger paying audience. This would be especially useful when a performance or event is otherwise sold out. Pay-per-view would be especially profitable when an event or performance has regional appeal and if the program can be carried over the Bay Cablevision regional interconnect.

As an alternative to pay-per-view distribution, Bay Cablevision could be asked either to pay for distribution rights to a certain number of locally produced events, or to help find underwriting or advertising support for the distribution of these events.

The notion of distribution over the regional interconnect suggests the more general idea of exporting some locally produced and staged arts events as an approach to developing Berkeley's economic base. If an export market can be demonstrated in the East Bay, perhaps certain events, performances or programs could find a wider audience nationally. Distribution beyond the East Bay would require access to microwave, telephone or satellite networks. The potential for exports, is of course, highly speculative.

Maintaining ethnic and cultural diversity is one of the City's goals. Providing local communications for the outreach and service delivery functions of the smallest segment and/or least commercial of arts is an effective method of maintaining variety.

Numerous locations may need to originate live programming. This suggests that some upstream capacity should be dedicated to this purpose rather than relying on remote microwave transmission. Internal wiring in certain buildings and portable production equipment will also be necessary.

Finally, it appears that there is currently small need for coordination and consensus communications because the various members in the arts community seldom interact. Yet, many of the institutions and performance groups at least share the same problems such as low public awareness of their product. In order for the arts community to claim cable related resources and realize the potential of those resources, more communication and cooperative action will be required. When that happens, planners should recognize the need for coordination and consensus.

Since the City has the responsibility and the authority for negotiating over cable resources, it might rely on the Civic Arts Commission to coordinate the necessary organizing and planning activities for the arts community use of access. Lists of grant applicants, workshop attendees and the 1988 NEA grant will suggest potential participants.

- C. **Human and Social Services Community:** Cable television can potentially help the City and its citizens address the human and social service needs that Berkeley cares so deeply about. In these times of financial stringency, cable television could help the city serve these needs more cost effectively. It could stretch meager resources dramatically. As with the investigation into economic interests, interviews were conducted with a variety of individuals. The same analytical approach was also used.

This heading includes a large number of communities involving dozens of organizations ranging in size from very large corporations to very small community centers. Despite this variety, all organizations are united around the human welfare goals they share. Many also share funding sources such as the City. Often, the same client-family will receive service from several communities.

Category definition and boundaries are a particular problem for the analysis. Many of the organizations receive some City funding and could legitimately be discussed under the municipal services category. Similarly, many of the organizations offer a program for job training and placement and could be discussed as part of the Economic Development Community. Nevertheless, the following list provides an idea of the range of human and social service communities active in Berkeley:

- Adult protection and care
- Alcoholism
- Child protection and care
- Developmentally disabled
- Disabled*
- Drug abuse*
- Family services*
- Gay and lesbian
- Health*
- Housing and homeless*
- Mental health*
- Demographic/ethnic populations (seniors, Asians*, women)
- Veterans services

** indicates at least one organization participating in the needs assessment*

Each community consists of a wide variety of organizations. Each organization frequently offers a number of very different programs (i.e., one organization may through different departments or programs participate in several communities), each community is often loosely organized, and the level of information processing and telecommunications sophistication tends to vary a great deal.

Human and social service communities tend to rely heavily on communications to accomplish their work. While not detailing the communication needs of any one community, the research interviews provide the following picture of many communities.

Outreach: Attracting/recruiting clients is a common problem and one that significantly affects the community's ability to function since state compensation is often linked to the number of clients served.

There is a continuing need to maintain a high public profile through general education about the conditions that the services address. This helps with collateral fund raising and indirectly sustains a public consciousness that hopefully has a political payoff in continuing support for state and federal grant programs.

All communities need to make their events calendar available to the public.

Service delivery: Client education is a significant component of the service delivered.

For example: reminding people of the need to give children shots, and where and when they can receive them free or at low costs in Berkeley, symptoms of VD and hours of VD clinics, how to get hot meals delivered, where to call for respite care and so forth.

Coordination: Most communities (those that are tightly organized) meet regularly, often weekly or twice a month. Most use the telephone regularly in the interim to conduct coordination communications.

Most staff members are over committed and lack the time and resources for long range planning, staff development and methods sharing.

Every community member often deals with the same clients and needs to share some client data and observations with the other members.

Data communications are especially needed and frequently missing

Consensus: Since these services are largely government funded, the clients are affected by public policy decisions. Communications to reach community consensus and to mobilize that consensus for City, state or federal decision makers is very important.

The unrelenting fiscal crisis facing all levels of government threatens to further reduce the funding required for human and social services. The war with Iraq should exacerbate this funding shortage. Using the cable system to provide a range of communication services seems prudent.

Virtually every community experiences the 4 communication needs. The communities most likely to begin to use cable resources to satisfy those needs are those that are either well organized (they meet regularly for example) or those whose members are at least aware of strong mutual interests. These tend to be those communities that are grant funded or City sponsored, or both.

In 1990, there were at least three good choices. The first is the Real Alternatives Project (RAP), a comprehensive interagency drug prevention program which consists of 9 organizations coordinated by the Berkeley Asian Youth Center.

The second is the 25 or so organizations that deal with at-risk-youth and which includes the participants in RAP. The third is the set of all community agencies funded by the City.

The At Risk Youth community identified its joint cable priorities and its cable needs. A half day workshop was held with nine individuals representing nine organizations (see Appendix D-9 for participating individuals and organizations).

The priorities of the At Risk Youth Community include:

1. Video programs produced by youth for youth
2. Video based training programs on a variety of subjects
3. Public information on organizations in the community and the services available from each
4. Information and actual service delivery to youth that are otherwise hard to reach

The needs expressed by this community include:

1. Affordable rates for all access channels so that low income households can receive these programs -- or an alternative distribution system for access programming
2. All libraries, community centers, recreation centers and service centers should be equipped to receive cable signals
3. Video production training should be available for Berkeley youth

In addition to the needs of the communities of interest discussed in general above, the following are cable related needs within specific communities.

1. A special situation exists with Alta Bates/Herrick Hospital. Alta Bates/Herrick could provide a rich resource for public and patient education through cable television. The hospital has an understanding staff of doctors, nurses and health educators as well as an extensive video library, but lacks a system for distributing the knowledge and expertise of its staff or the contents of its library beyond its own facilities.

Health care can be expected to become an even more significant community problem in the next 15 years. There is an aging population which creates the need for chronic care, as well as increased need for acute care to treat conditions associated with aging such as a variety of cancers. There is also the AIDS epidemic which, at its current rate of increase, threatens to exhaust the resources of the health care community in most cities.

In many of these situations, the need for treatment and particularly in-patient treatment can be minimized if those at risk follow healthy diets, get adequate exercise, perform self-diagnosis when possible and become active participants in what is often referred to as wellness. For a wellness program to succeed, the institutions in the health community need to provide high levels of continuing public education. Whenever possible, this information should be retrievable on-demand by the user.

The high cost of in-patient care has resulted in a program of sending most surgery patients home within 2 days. These patients could significantly benefit from the ability to view video taped recovery regimens in their homes.

The wellness education functions require substantial channel capacity. The out-patient recovery education requires addressability capabilities. Much of the coordination communications will require data capabilities.

The hospital also needs to more effectively communicate to the public about distinctions in its services and how they are accessed. For example, the Urgent Care Clinic at Herrick is underutilized because many with injuries or conditions that are not life threatening clog the emergency room at Alta Bates.

Many hospitals across the country are moving into very sophisticated image transfer systems allowing, for example, laboratories, hospitals and doctors offices to share x-rays, sonograms and other medical records. The horizontal communication needs within the health care sub-community were not examined, but its clear that the capabilities and costs of health care institutions will affect the quality of life for Berkeley residents over the next 15 years.

2. There is a rapidly increasing need for coordination communications in many human and social service communities. Because of the alcohol and drug epidemic, many mental health workers are having to be retrained in substance abuse treatments. The AIDs epidemic requires retraining for how to work with HIV positive clients. Experts in these matters are often brought to a central facility in Berkeley. These meetings should be cablecast over an addressable system to locations throughout the City.
3. Many of the clients of human and social services are not highly mobile due to a disability, age, language difficulties or income. The more services can be delivered directly to homes or collected in a service center the better.

4. Many of human and social service consumers have low incomes (\$600 per month is not unusual). Bay Cablevision's disabled discount needs to be improved, more effectively advertised and extended to cover installation charges. Discounts should be available generally to those on low fixed incomes.
5. Closed captioning should be made available and all public access facilities need to be accessible to the disabled.
6. Some of these sub-communities have captive audiences for large parts of the day. This includes people living in shelters, group residences or transitional houses who may spend between 4 and 6 hours per day watching television. This provides an opportunity for skills training, nutrition education, human service referrals etc.
7. The National Science Foundation through its Research Applied to National Needs program (RANN) demonstrated in the late 1970s that two-way cable television could significantly improve the delivery of human and social services to a community of seniors. This technology should be considered for Berkeley.

D. The Political Activist Community identified its joint cable priorities and its cable needs. A half day workshop was held with nine individuals representing eight organizations or offices (see Appendix D-10 for participating individuals and organizations).

The priorities of the Political Activist Community include:

1. Ability to distribute programs to other East Bay cities
2. Interactive capabilities allowing dialogues and meetings
3. Ability to narrowcast to target neighborhoods
4. Facilities to ensure distribution of government information, town hall meetings, Council meetings, election results, and candidate forums
5. Crime prevention information and programs
6. Information on government services such as transit or recycling schedules
7. Unbiased community news
8. Video production training for kids leading to programming produced by kids for other kids

VI. FINDINGS: EDUCATION

Support for Educational Access is strong. The community ranked educational programming, telecourses, coverage of UCB lectures and events, and programming for children among the most valuable programming access channels could provide Berkeley.

The educational community was even stronger in its interest in providing that kind of programming. Through the interviews and the planning workshops the educational community identified their shared priorities, the cable priorities for each participating institution, and developed a consensus on their cable related needs. Furthermore, they have committed to meeting to refine their recommendations and to initiate a long term planning process once the franchise renewal process is completed. (Please see Appendix D-8 for the Educational Report and List of Attendees.)

To summarize the findings from the educational planning sessions:

A. Shared Priorities:

1. **Increased cooperation and resource sharing:** For example, UCB has satellite receive capability for video conferencing. Space limitations on campus and no delivery mechanism into the community severely limits access to this resource, which UCB would like to share. Providing UCB with the ability to originate programming from the Media Center in Dwinelle Hall and wiring school sites (or connecting these sites with an I-Net) would bring live educational video conferences to Berkeley schools at very low cost. Vista has an electronic library which Berkeley High School students could access if there were two way data capacity between the two sites.
2. **Greater coordination of existing programs:** The schools currently participate in joint program - Lawrence Hall of Science provides specialized math and science classes for girls and minorities; UCB School of Education trains Berkeley teachers; Vista offers advanced placement classes for Berkeley. All of these could be offered on site - decreasing travel, increasing participation, and allowing more supplementary activities - if the educational sites were linked by cable and had multiple origination sites or if they were linked on an I-Net.
3. **Expansion of existing programs:** Each institution supports ongoing programs - curriculum development, staff training, student education - which could be shared with other schools if there were a easily accessed delivery mechanism - that is, if the schools could deliver video and data among themselves. For example, BUSD could tap into the UCB School of Education for curriculum development. Staff development programs now offered by Vista or Peralta could be electronically delivered to BUSD central office staff or UCB's 15,000 employees. It should be noted that these educational benefits could be expanded to the City (which now sends employees to Vista for training) if city buildings were wired or if they were on the I-Net.

B. Institutional Priorities:

Within each institution there were existing needs that could be addressed by cable TV. For example:

BUSD - faced with a continuing budget crises and increasing demand - identified increasing resources to the classroom (incorporating into the curriculum programming from CSPAN and Discovery), downloading Media Center tapes over cable, bringing community resources to the classroom (i.e., Lawrence Hall of Science and Oakland Museum) to replace eliminated field trips, and providing on-site teacher training.

Vista - in the grips of a statewide community college budget squeeze - looks to expand a totally revised telecourse program, offer contract education to small and medium sized businesses in the community, provide advanced placement classes on site during the school day to Berkeley juniors and seniors, and expand its employee training program to the City.

UCB - with its well equipped video and radio production resources - would like to bring the events of the campus to the Berkeley schools and community at large in addition to the cooperative projects identified above.

- C. **Recommendations from the Educational Community:** Appendix D-8 presents the educational community's recommendations. Most of the needs are self explanatory, but the following comments provide clarification for a few of them.

Recommendation #1: Signal Reliability Ensure signal reliability and clarity on all channels.

Recommendation #2: Universal Build of the System Cable distribution into business and industrial areas in Berkeley would permit Vista to provide on-site contract education and training programs to small and medium sized businesses that now have no access to low cost training now available to major corporations.

Recommendation #3: Connect all Vista College and Berkeley Public School sites and administration buildings to the consumer cable system to ensure access to the PEG channels and to other programming services such as C-SPAN, Discovery, CNN and so on.

Recommendation #4: Adequate channel capacity to accommodate current and future educational channel programming. Five education channels may prove to be a conservative long term estimate. Since education and job training are essential elements of the City's long range economic development program, and access to a diversity of arts and culture is a local value, the educational community needs may grow substantially in the near future. Telecourses, contract

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education, distant learning programs, live video teleconferences and coverage of educational meetings are in high demand but consume a great deal of channel time. Such programs are not speculative, for they have proven very successful in other communities. Irvine Unified School District has delivered two way interactive curriculum over cable for years. Hawaii has embarked on a statewide distant learning program.

Oklahoma and Prince George County Md. have established the cost effectiveness of their educational services delivered over their fiber I-Nets. Los Altos, De Anza and Bakersfield Community Colleges, Chico State University, and University of Southern California have established the value of telecourses.

Recommendation # 5: Adequate production facilities and equipment

Recommendation # 6 - One upstream channel should be allocated for interactive instructional instruction. Cable systems are designed to send signals from the cable headend to the subscribers (downstream). Using electronics one or more cable channels can be reversed allowing signals to be sent back to the headend from one or more locations on the subscriber network. An upstream channel, for example, would permit UCB to receive a video conference via satellite, send that program back over the upstream channel to the cable system headend for retransmission to sites in the community. That same upstream capacity could be provided over an I-Net.

Recommendation #7 - Interconnection of one or more educational channel Peralta, Vista and UCB (especially UC Extension) need to deliver some of its services to other cities in the East Bay. To do this, an interconnection to neighboring cable systems is required. BCPN is currently interconnected to Berkeley, El Cerrito, Hercules and Richmond. Peralta College TV is interconnected to all Bay Cablevision systems, Cable Oakland and United Alameda. Vista and UCB need similar distribution for extension classes and telecourses to make them economically feasible.

Recommendation #8 - Institutional Network (I-Net): An I-Net usually refers to a cable loop, separate from the cable subscriber network, that connects a number of institutions such as city departments, schools, hospitals, and so on. These I-Nets can carry two way video, data or voice. Sometimes rather than building a separate cable loop, capacity is reserved for these same institutions on the subscriber network. In either case, the institutions on the I-Net can engage in two way, closed circuit communications with each other. Educational institutions

were users of the first I-Nets built in the nation during the late 1970s. Public institutions in Portland were served by an I-Net during the middle 1980s and that facility was also used to generate revenue by selling data transport to private clients in the city. While falling from grace in the mid 1980's, I-Nets are now enjoying a renaissance. For example, I-Nets are actively used in the States of Oklahoma and Hawaii, the Counties of Prince George and Montgomery in Maryland, and the California cities of Santa Ana, Mtn. View and Beverly Hills.

VI. FINDINGS: GOVERNMENT

The government findings address the communication needs of the major City departments. The two exceptions, Health and Human Services and Planning and Community Development, are closely linked to networks of community organizations and were discussed as part of the public findings in Part V of this Section.

The City's "information strategy" is presented first because 1) communications are a major component of the strategy, and 2) the information strategy provides a model for a comparable statement of a communications strategy.

A. Information Strategy

The City Council has recently adopted a new strategic plan for municipal information systems. The motivation for the plan was the need for increased efficiency in government administration and service delivery, and for empowerment of citizens through timely, low cost access to municipal information.

The plan has many components, several of which are identified below:

1. Implementation through a five year, \$1.5 million capital investment program.
2. A shift of the Data Processing Division's role from maintenance of central data processing resources to 1) strategic planning and development for citywide systems, and 2) training for staff members in user departments.
3. A shift in the information system architecture from a few large computers accessed through individually wired terminals, and about 400 mostly free standing personal computers to user-department controlled personal computers, interconnected through modular local area networks with gateways to the City's larger computers.

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4. Development of a "data image" of the City. The most important characteristics of the City, the municipal government and municipal administrative processes will be contained in computer data bases accessible in real time by City management and staff and also, where confidentiality is not required, by the public at large.
 5. Conversion of critically important document files to computer retrievable optical storage.

Although the plan obviously involves computers, data bases and the Data Processing Division, a central innovation is the development of a new communications system. Indeed, the plan explicitly mentions existing communication problems such as interpersonal messaging, document transfer and data sharing.

Implicit to this strategic plan is a municipal data network between all computer equipped City offices. The network will require high speed capability and sufficient bandwidth to transport color graphic images (of maps, for example). In its final stages of development, perhaps in year 4 or 5, the network will ideally also distribute non-confidential municipal information to public centers in order to provide citizens with access to the City's data (and graphic) images. Alternatively, provision could be made for dial-up access for citizens with personal computers.

One potential cable application suggested by the information strategy involves transport to implement the data network between City facilities. An institutional network (I-NET) provided as a condition of the cable franchise could be used as a link in a backbone network capable of satisfying some of the data transport needs. As the implementation of the information systems plan reaches years 4 and 5, the need for public access to City data bases may be satisfied by using the I-Net for distribution to City and community facilities. Between one and three 10 MHz pathways would be needed for this application.

The strategic direction adopted for data communications can also be applied to video communications. This means that video would be used to foster increased efficiency in government administration and service delivery, and for empowerment of citizens through timely, low cost access to that municipal information which is uniquely suited to video distribution, i.e., events or pictures. Of course, the City will ultimately need to develop a communications master plan that will comprehensively address voice and video services, data and image transport and a Citywide network.

In the meantime, parallel to the some of the components of the information systems plan, a strategic direction for video communications would involve the following:

1. Capital improvements to the municipal communications infrastructure such as wiring for the Council chambers. All or most of this investment can be provided by the cable franchisee as part of the new franchise agreement.
2. Corporate innovation creating a video communications responsibility inside municipal government, with new roles and procedures for user-departments. Funding for video communications planning, development and management activities can be offset in whole or in part by the cable franchisee fee.
3. A video communications architecture in which particular buildings and rooms will be wired and equipped to originate and/or receive video.
4. A "picture image" of Berkeley that will include easily retrievable video images of the City's physical attributes, its cultural diversity, and the municipal government in terms of its public services and political decision making processes.

Video will not improve interpersonal messaging, document transfer or data sharing. But video helps address different communication problems from data. Internally, electronic meetings are possible where previously time and energy consuming face to face meetings were required. This facilitates closer coordination of staff distributed around the City. Hard to get personnel can more conveniently participate. Missed meetings can be viewed on video tape if necessary.

Externally, in communications with citizens and the public at large, video has several advantages over data. Television watching is very user friendly while computer access via keyboards or even touch screens can be intimidating to many people. Television receivers are in virtually every household while computer penetration averages only about 25% of households. Of course, video is a complement to data rather than a substitute.

For video to provide effective access to municipal information, cost must not be a barrier. Either subscriber rates for PEG channels must be low, and/or PEG must be viewable at City and community facilities.

The City's adopted information strategy provides strong evidence of cable related needs specifically for data transport and generally for applications leading to efficient and cost-effective government operations and empowerment of citizens. An I-Net capable of video and data transmission, wiring inside of government facilities, and upstream and downstream video capabilities are needed from the cable franchise.

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Findings regarding the cable related needs of particular departments will follow the format of the four communication functions used in the discussion of public and education needs.

B. Recreation Department

The Department operates five recreation centers and offers a wide range of activities, programs, camps and clubs for adults, teens and children. The annual budget is approximately \$1.4 million and over half of it is generated by recreation activities. With increased competition for general fund resources, the Department would like to reduce its administrative and service delivery costs and improve its marketing effectiveness in order to increase revenue.

1. Outreach

The Department relies on a summer and a fall brochure, flyers and City sponsored newsletters to market its programs. The promotional print budget is about \$20,000 per year.

Time on a municipal video calendar plus a regular hour to describe programs and answer questions would increase the effectiveness of the outreach function. Video tape segments of each park, pool, picnic area, softball field, and recreation center could help staff stationed at the rental desk more effectively assist potential clients of City facilities. These same tapes could be shown on the government channel in order to increase the number of rentals per year. The Department currently makes between \$25,000 and \$40,000 annually from rentals.

2. Service Delivery

Live cablecast from recreation centers of certain events and programs would extend the Department services to all other recreation centers and even to homes, if desired. Some classes currently offered for fees could also be offered to residents on a pay-per-view basis. This would increase department income and extend the service to those who cannot attend in person. The Department is also interested in including video production classes in its service offerings.

3. Coordination

Staff meetings of some or all remote personnel could be held without bringing the individuals to a central location. Training on new procedures or programs could be held with staff at their job sites. Conferences and meetings with other departments or community groups could be held more cost-effectively. Recreation centers could become facilities for electronic meetings by other groups -- potentially providing a new source of income if fees are charged for this service.

4. Consensus

The Parks and Recreation Commission would like to hold public hearings over cable with the capability for viewer call-in.

In order to satisfy these needs, the City will need to acquire sufficient channel capacity, low cost video conferencing equipment, portable production equipment, editing capabilities, upstream and downstream capabilities from each recreation center, and a VCR for each recreation center (television sets are currently in place).

C. Fire Department

The Berkeley Fire Department operates out of seven fire stations and an Emergency Operations Center. In addition there is a Training Center and EMS office. The current budget for Fire and Emergency Services is almost \$13 million. The fire service is a highly technical operation which requires continuous training and staff certification in a wide variety of skills.

1. Outreach

A citizen needs to know to dial 911 in case of fire. Multiple language information tapes could be cable cast on the channel and made available to service groups. The Fire Department needs occasionally to recruit fire fighters. Particular events such as open house should be included on a City events calendar. The image of the Fire Department could be presented to the public over the government channel.

2. Service Delivery

The Fire Department delivers both fire suppression and fire prevention services. Fire prevention requires a great deal of public education. The service delivery communication function includes the following:

a. Emergency Preparedness Programs

Emergency preparedness information is currently disseminated through presentations at neighborhood watch meetings. Video taped presentations would allow one Fire Department representative to present several "lessons," or would allow some watch groups to view tapes without a Fire Department speaker being present. The tapes could be distributed over the government access channel or Fire representatives may, in other situations, make live presentations on cable with citizen call-in.

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b. General Fire Prevention Information

There is a large amount of fire prevention information that should be directed to residents as well as tenants and owners of commercial buildings. Topics range from fire safe landscaping to storage of flammable materials. Live or taped programming over the government channel would allow Fire representatives to communicate with many more citizens than they are able to reach on a personal basis.

c. Fire Prevention Programs in Schools

Before recent budget reductions, the Fire Department had a representative make frequent fire prevention presentations in-person in the Berkeley School District. Cable access to the schools would allow the Department to cost-effectively return this education to the classroom. Access can be achieved over an education channel.

3. Coordination

The need for coordination communications includes the following:

a. Training

Fire fighters must fulfill extensive training requirements. For example, over the next several years, Berkeley fire fighters will receive training in hazardous materials, the new uniform fire code, and emergency medical services (certification expires every two years). Currently, each course is presented in six sessions -- one for half of each of the three fire fighter shifts. Training tapes are shown only at two locations and this necessitates costly movement of personnel.

The costs include travel time, gas and a trainer for 6 sessions. There is also an unquantifiable risk of loss to the community from reducing by 50% the number of fire fighters at their stations.

FEMA offers free training to fire departments over the Emergency Education Network. The EENET is available from Spacenet 1 - Transponder 2 but is not currently received by the Fire Department.

b. **Internal Emergency Communications**

Emergencies often require the Fire Chief to quickly communicate with each fire station. Existing procedures require physical travel to each station, phone calls to each or a meeting of key personnel at a central location. A cable link that could be used exclusively by the Fire Department in emergency situations would provide one more alternative (seven station audio conferencing capability is another).

4. **Consensus**

Meetings concerning fire department policies and procedures could be carried on the government channel.

In order to satisfy these needs, the City should develop upstream and downstream capability for the EMS office, the Training Center, the Emergency Operations Center, and the Fire Chief's Office (all fire stations currently receive a cable drop). If an I-Net is developed, it should pass all 7 fire station plus the four facilities mentioned. Modest video origination equipment for emergency situations and for live training opportunities should be acquired. Three additional VCRs are also needed. Since public information is most effectively distributed in the evening, a second municipal channel on the subscriber network may be required so that there is no conflict between meetings of the City Council or Commissions of various types.

The Fire Department also is interested in an emergency over-ride capability on all cable channels in order to communicate with citizens in case of a disaster. The question of over-ride authority should be discussed with the cable operator and designation of responsibility should be debated by the City Council.

D. **Police Department**

The Berkeley Police Department operates a central station and only recently opened a satellite station house. Public education is its greatest need for video communications. The current budget is approximately \$27 million.

1. **Outreach**

Like with the Fire Department, a citizen needs to know to dial 911 in case of an accident or emergency. Police recruiting campaigns and notice of community events should be included on a City cable calendar.

2. Service Delivery

Public education is a significant component of the Police Department's services. A "crime stoppers" show and a public call-in show are general possibilities. The Department also has a number of specific programs that lend themselves to video based public education. One example is an effort to teach community groups how to shut down crack houses by taking the landlords to court. The Department has a \$15,000 contract with the Drug Abatement Institute to provide this training and the government channel would be a resource for the effort.

Education for neighborhood watch groups can be improved through the use of specific video taped presentations at in-person meetings, or through live and taped cablecast over the government channel.

3. Coordination

The need for coordination communications between the two police stations had not yet become clear at the time of data collection because the second station was new. It is reasonable to assume that video applications will quickly emerge.

The Police Department coordinates the Berkeley Safe Neighborhood Committee. This Committee consists of one representative from each of the 325 neighborhood watch groups. Video communications between the police and the Committee members could significantly improve the performance of the Committee.

4. Consensus

The Police Commission meetings could be carried on the government channel.

In order to satisfy these needs, the City should acquire government channel capacity and addressable capabilities. Access to a production studio will also be required. The capability for video communications between the two police stations should be acquired for live training opportunities or emergency situations.

E. Library

The Berkeley Library system has four branches and one main facility. Its annual operating costs of approximately \$6 million are provided by a special tax, while capital improvements come from the City's General Fund. The City Librarian reports to a Board of Trustees, not the City Manager. The Library is a very popular local institution -- over 2/3 of the voters supported the special tax.

1. Outreach

Even though over half of Berkeley's population has a library card that has been used at least once in the past year, the Library has a continuing need for outreach communications. Access to an events calendar on the government channel is a minimal requirement. A regular program that would describe the services available and answer questions, similar to the Library column carried monthly by the Berkeley Voice, is also needed.

For example, the Library offers a free literacy program for adults. There are typically more volunteer teachers than there are learners wishing to join the program. Another program, the "books for the homebound" doesn't begin to service all those who qualify.

In addition to the Berkeley Voice, the Library conducts its outreach through flyers, direct mail and public service announcements on radio and television. It is difficult to target a Berkeley audience with newspapers and the electronic media. A government channel would provide access to Berkeley residents and would allow the fast dissemination of information about new programs, services or procedures (such as extended hours at certain branches).

2. Service Delivery

The Library maintains a videotape collection with over 600 titles. All of the tapes are kept at the main branch. A video connection between each of the four branch libraries and this central collection is needed so that patrons can view tapes at the branches without expensive duplicating costs or time and energy costs of physically delivering the desired tapes.

The Library offers many different programs that lend themselves to video distribution. There are storytelling sessions for children, a series of lectures on local history, a variety of panel discussions such as one held recently regarding censorship, and various music and dance performances.

The on-line computer circulation system provides convenient electronic access to the card catalog from the four branches and from home for those with a modem equipped computer. The cost to the Library of leased telephone lines is approximately \$700 per month. Additional charges may accrue to those accessing the system from home. This application involves data communications which are discussed above under Information Strategy.

3. Coordination

In-service training for staff at the five facilities could be more effectively accomplished through the use of video communications. The Library also maintains a large group of volunteers that operate the literacy, homebound and other programs. These volunteers must be trained and coordinated. An addressable government channel could be used for this purpose.

4. Consensus

The meetings of the Library's Board of Trustees should be cablecast. In addition, the Library occasionally needs to develop community consensus about service delivery problems. One example is the use of the Library as a day time shelter by the mentally ill homeless. This has produced a conflict between service to patrons and humanitarian service to the homeless.

In order to satisfy these needs, the City should wire the central library and the four branches to both receive and originate video signals. Both upstream and downstream capability will be needed for each Library facility. If an I-Net is developed, it should pass all 5 facilities, particularly for carrying the data communications that now cost \$8,400 a year. Portable video origination equipment is needed for electronic meetings and modest productions such storytelling and other such programs. A professional studio and technical staff will be required to satisfy needs for high quality productions.

F. City Clerk

The Office of the City Clerk provides information internally to City Departments and externally to the public on the activities of the City Council, Redevelopment Agency, Housing Authority and Boards, Commissions and Committees. This includes agenda packets, meeting minutes, ordinances, resolutions and general records. The City Clerk is also responsible for conducting municipal elections and this involves providing information about candidate nominations and financial reports. Its budget is under \$1 million.

1. Outreach

The City Clerk must inform the public of the meeting schedules and agendas of each political body. These are currently available over Community Memory. Public hearings and special events are now announced in the Daily Cal but its audience is primarily the University community. The government channel could also be used to encourage voting in municipal elections and to make voting information such as registration or polling place locations more available.

2. Service Delivery

The City Clerk will be an extensive user of the new computer system since so much of its work involves data and document storage, retrieval and transfer. For example, the Office received over 60,000 requests for information in 1989. Many of these requests could have been processed without personal attention by Office staff if electronic retrieval of City Clerk's information were possible. Using a cable I-Net for some portion of these data communications has been previously discussed under Information Strategy.

Video training for citizens on how to register to vote, what it means to be a precinct worker, how Council meetings run, how to speak at a Council meeting, etc. could make Office staff more productive, improve meeting processes and increase citizen participation.

3. Coordination

Data and graphic communications between the City Clerk and other City Departments is the largest need. The Office also assists other departments in various aspects of records management. Video communications could assist staff in providing this assistance.

4. Consensus

The political bodies supported by the City Clerk should all be taped and/or cablecast.

In order to satisfy these needs, the City should wire City Hall, particularly the Council chambers and other rooms or community facilities in which an official political body regularly meets. Data communication needs should be satisfied by using an I-Net.

G. Other Departments

Public Works, Legal, Auditor, Finance and Personnel departments, the Rent Stabilization Board and the Office of the City Manager all have varying needs for video communications. These applications add to the channel capacity needed but do not introduce structural requirements to those already established. For example:

1. Outreach

The Personnel Department operates a telephone hotline for providing access to City job openings. These could be added to the cable text events calendar for viewing over the government channel. As part of the proposed "information strategy" (see page 23), each City department should provide an image of itself, its functions, procedures and accomplishments to the public over cable.

2. Service Delivery

The Rent Stabilization Board has a particularly difficult public education task. Rules and administrative procedures that govern tenants' complaints on housing maintenance or landlords' request for increases in excess of the general adjustment require staff explanations to each new petitioner. Video tapes viewable at the Rent Stabilization office or over cable, and a live call-in program would help increase staff productivity. The City Manager's Office can use the government channel to explain important policy proposals prior to their discussion before the City Council. Presentation of the annual budget is one example.

3. Coordination

The Personnel Department is responsible for providing in-house training. Providing some frequently offered training programs on video tape would improve Personnel staff productivity and make training available to those who do not work regular day shift hours. This group includes refuse workers and janitors. The Public Works Department has staff at various locations in the City. Video could be used between those sites where staff require frequent face to face contact.

4. Consensus

The City supports over 45 Boards, Commissions and Committees. A video taped record of some would provide an opportunity to review the meeting to interested citizens as well as members who could not attend. In addition, it will be in the public interest to distribute over the government channel taped or live meetings of some of these political bodies. In other situations, the City Council will want to quickly increase citizen awareness about a municipal issue pending before the State Legislature.

VI. RECOMMENDATIONS: COMMUNITY NEEDS AND INTERESTS

The following recommendations express the cable related facilities and services that would satisfy the community needs and interests described above. The accounting for the cost of the recommendations is discussed in Section V.

A. Public, education and government access channels

The immediate need for PEG access is 3 new channels (1 each for public, education and government). The existing channel used by Peralta community College should continue in its current use. The public channel will help satisfy outreach needs for many community organizations. The education and government channels will address immediate needs for service delivery (such as telecourses or Council meetings) and for outreach (class schedules, events calendars and the like). The Bay Cablevision Programming Network functions as a local origination channel and should not be counted as PEG.

The minimum long term need for PEG access is two channels each for public, education and government use, plus the Peralta College TV channel. The total PEG allocation should be seven channels unless the seven channels are fully used and subsequent needs assessments determine that the number should be greater. Note that the educational community alone developed a very credible plan for five channels in order to facilitate resource sharing and joint projects.

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A rebuild will most likely be required in order to satisfy the long term needs. Conversely, a rebuild should automatically provide the additional access channels.

It may be in Berkeley's interests to establish a standard allocations for community benefit in case very high capacity cable systems become a reality. Or the standard could be applied to competing vendors when they enter the marketplace. For example, a standard of 10% of system capacity dedicated to PEG could be used if the telephone company offers video services to the home, and if local requirements are not otherwise preempted. It may be that such a standard could not be applied across the board without a substantiating needs assessment.

B. Public, Education and Government Access Equipment and Facilities

The skill levels of potential public access users in Berkeley range from low to high, and interests in production quality range from live talking heads to professionally shot and edited programs. A range of resources will be needed to satisfy the different types of users.

Novice and student producers or community members interested in a video conference or electronic meetings need durable, easy to operate cameras and basic offline editing equipment. Much of this programming may be cablecast live and not require recording or editing.

Educators, advanced producers, and others will need to produce high quality instructional or promotional material. This group will need studio quality cameras, on line editing and sophisticated sound editing equipment.

In addition, there are tradeoffs between centralized, decentralized and mobile production capabilities. Criteria such as physical accessibility, ease of use, and flexibility should be applied.

Many cultural, artistic and civic events occur at different community, educational and municipal sites throughout the City. Therefore, portable equipment should be provided, and special consideration should be given to acquiring a production van. Mobile equipment will make high quality production capability available at any site in Berkeley. A mobile van, however, is not a single commodity. Capabilities and costs have a considerable range.

Detailed equipment packages will be developed as part of the planning for the access facility after the franchise is approved. However, a realistic scenario is proposed below. The community needs:

1. A central facility that provides a fully equipped studio (including 3 cameras, lighting, video and sound control boards, playback and on-line editing) for all users desiring a high level of production.
2. A government production unit that includes up to 3 portable cameras. The City Council Chamber should be wired in order to cablecast Council meetings live while allowing the portable equipment to be used in the field or at other government locations. City government would use the central facility or the mobile van when elaborate production and editing is required.
3. An upgrade of the Berkeley Unified School District production studio to include up to 3 portable cameras and a basic editing unit for student training, coverage of school events and taping of some telecourses by Vista Community College. BUSD would use the central facility and van for more elaborate productions.

(Note : UCB currently has access to adequate production facilities; Vista may utilize the studios of Peralta Community Television.)

4. Internal wiring so that at least one room in each designated building is equipped to receive and originate video signals. The designated buildings should include schools in the BUSD, City government buildings including senior centers, recreation centers and libraries, Vista College and vital community meeting places such as the offices of the South Berkeley Neighborhood Development Corporation and key churches. The wiring and the portable equipment packages identified in #5 should allow any meeting room to be transformed into a low quality production studio suitable for video taping or live video conferencing. Similarly, each such room could be used for group viewing of community meetings held elsewhere in the City and cablecast live.

C. Network Capacity And Features

1. Rebuild:

The existing 54 channel system cannot be expanded further. A rebuild of the system to higher capacity will be required in order to meet the long term PEG access needs. Furthermore, a variety of new services including program channels, pay-per-view programming, on-demand services, and two-way video will push the need for more capacity. The operator's need for advanced system features like addressability, upstream capability and hub architecture will also help justify a rebuild. It is still unclear, but high definition television, expected in the mid-1990s, may require substantially more bandwidth than conventional television.

Also given the regulatory and market uncertainty, this is not the best time to embark upon a major system rebuild. Within two to four years, the technological options as well as the identity of the players and their respective market niches will be known.

Therefore, it is reasonable to establish in the franchise agreement a trigger for the system rebuild. The trigger could consist of a combination of any of the following:

- a. full utilization of the 3 PEG access channels
- b. decline of fiber backbone/neighborhood hub (see Section VI) construction costs to a threshold amount. Note that architectural options should be evaluated once the design for the rebuild has been triggered.
- c. introduction of a certain number of new satellite program services
- d. penetration of high definition television sets beyond a threshold
- e. cable subscription penetration rate in Berkeley above a certain amount

2. I-Net:

In the meantime, there is another option available for obtaining bandwidth (capacity) for meeting short run community needs. This is a separate cable, which could be fiber -- perhaps the start of a future citywide fiber backbone, that would connect the central business district (cbd), UCB campus, West Berkeley industrial area and South Berkeley. This sort of system is often referred to as an institutional cable system or I-Net.

The accompanying map and overlays indicate that between 2/3 and 3/4 of the municipal buildings, educational facilities and human and social service agencies in the City are located along this route. The community economic benefits of connecting these areas has been more fully described in the text.

The proposed I-Net would require a cable system of between four miles to as much as twelve depending on the coverage needed in each area and the exact route chosen. Even if built entirely underground, this system enhancement would cost substantially less than a complete rebuild.

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The system should be capable of carrying data and video in both directions. The short term needs associated with coordination communications and service delivery communications would be addressed by this I-Net. In one example, the I-Net would connect the UCB video conferencing center with its limited seating capacity to all locations along the route as a way of distributing national and international meetings available from via satellite.

A split between the City/community and Bay Cablevision of the available capacity could be negotiated if Bay Cablevision was interested in selling telecommunication products with its share of the I-Net. This assumes the operation conforms with prevailing State and federal regulations.

If Bay Cablevision is unwilling to provide the I-Net in the short term and agree to a formula that would trigger the long term rebuild, the City can offer two options.

- a. provide for a significantly shorter franchise term, three of four years for example, or
- b. require an annual payment into a rebuild fund that would revert to the City or be immediately applied to a rebuild in case of sale.

D. Regional interconnection

The Bay Cablevision Programming Network is currently interconnected with Bay Cablevision systems in Richmond, El Cerrito and Hercules.

At least one access channel (for shared PEG use) should be interconnected immediately to the surrounding Bay Cablevision system providing an East Bay PEG network. This system should allow programming originating in any of the East Bay communities to be shared with homes and public buildings connected to the cable system in other cities.

E. Leased access channels

The Cable Act requires 10% of the channel capacity be reserved for leased access for systems with more than 35 channel capacity. This provision of the law is seldom enforced anywhere. Although current demand for leased access channels is now low and channel capacity is limited, the City should address leased access in the franchise in anticipation of a future rebuild. Although terms are not within the City's power to influence, the operator may voluntarily adopt terms that satisfy community needs.

Bay Cablevision may consider a two tier rate structure. The lowest rates should be reserved for educational and non-profit organizations to offer, for example, contract education or fund raising events over a leased channel. Commercial programmers should be charged normal rates.

F. Universal build

All businesses and residences in Berkeley who desire entertainment services, PEG access services, leased access programming or I-Net services should have access to the cable facility.

G. PEG access on lowest priced tier

The franchise should contain provisions that ensure that PEG access channels remain available on the lowest cost tier offered by Bay Cablevision, including the current discounts to seniors and the disabled. These discount packages should be better publicized as part of this effort. Bay Cablevision may be willing to consider a sub-basic or lifeline tier so that income is not a barrier to access to community information.

H. First Source

The City should attempt to get Bay Cablevision to sign a First Source agreement if it has not already done so. Cable construction, maintenance, customer service and management jobs could be involved.

I. Customer service standards

The new franchise agreement should include strict customer service standards and sanctions if they are not met, including liquidated damages. A set of standards are included in this report in Appendix C.

J. Franchise transfer or sale

In case of sale or transfer the City should require the new owner to assume all unmet commitments or force Bay Cablevision to finance the commitments prior to transfer.

K. Letter of Credit

Since Lencomm may have difficulties in securing credit because of its highly leveraged position, the City may wish to require an irrevocable letter of credit. This letter would be redeemable (at the option of the City) in the event of failure to comply or sale of the system.

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**MAP OF BERKELEY
COMMUNITY, EDUCATIONAL AND
GOVERNMENT FACILITIES**

Attached is a map of Berkeley with four (4) overlays showing (1) major Government, (2) General Educational, (3) Educational - UCB and (4) Public facility locations. The keys that follow identify the buildings corresponding to the numbers.

Please note that some numbers represent more than one building (ex, Government overlay, location #3 represents five (5) municipal buildings).

GOVERNMENT BUILDING LOCATIONS

<u>AGENCY - DEPARTMENT</u>	<u>ADDRESS</u>	<u>No.#</u>
ANIMALS SERVICES: POUND	2013 2ND STREET	1
ASSEMBLYMAN TOM BATES' OFFICE	1414 WALNUT STREET	2a
CONGRESSMAN RONALD DELLUM'S OFFICE	1720 OREGON STREET	2b
CITY HALL BIRTH & DEATH RECORDS CITY ATTORNEY CITY AUDITOR CITY CLERK CITY COUNCILMEMBERS CITY MANAGER'S OFFICE DATA PROCESSING ENVIROMENTAL HEALTH LICENSE & COLLECTION MAYOR'S OFFICE PARKING FINE COLLECTIONS PLANNING & COMMUNITY DEVELOPMENT PUBLIC HEALTH PUBLIC WORKS ADMINISTRATION: ENGINEERING RECYCLING DIVISION TRAFFIC ENGINEERING RECREATION: ADMINISTRATION AQUATIC PROGRAMS CAMPS DISABLED RECREATION RENT STABILIZATION PROGRAM SUPERVISOR WARREN WIDENER'S OFFICE TAX COLLECTION ZONING	2180 MILVIA STREET	2
DISTRICT ATTORNEY	2120 M L K JR WY	3
ENERGY - WETHERIZATION	1013 PARDEE	4
ENGINEERING	2001 ADDISON	3
FIRE DEPARTMENT	2121 MCKINLEY AVENUE	3
GARBAGE COLLECTION: DUMP/WASTE DISPOSAL	1201 2ND STREET	5
HEALTH & HUMAN SERVICES ADMINISTRATION	2180 MILVIA STREET	2

GOVERNMENT BUILDING LOCATIONS

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<u>AGENCY - DEPARTMENT</u>	<u>ADDRESS</u>	<u>No.#</u>
FAMILY-YOUTH & CHILDREN'S MENTAL HEALTH	1925 DERBY	6
WIC PROGRAM	830 UNIVERSITY AVENUE	7
HOUSING AUTHORITY	3200 ADELINE	8
LIBRARIES		
CENTRAL	SHATTUCK & KITTERIDGE	9
CLAREMONT BRANCH	2940 BENVENUE AVENUE	10
NORTH BRANCH	1170 THE ALAMEDA	11
SOUTH BRANCH	1901 RUSSELL	12
WEST BRANCH	1125 UNIVERSITY AVENUE	13
MARINA OFFICE 201 UNIVERSITY AVENUE	14	
MENTAL HEALTH SERVICES		
ADULT OUTPATIENT	2640 M L K JR WY	6
COURT PROJECT	1844 ADDISON	3
POLICE DEPARTMENT	2171 MCKINLEY	3
POLICE REVIEW BOARD		
CITY JAIL		
PUBLIC WORKS DEPT.:		
ADMINISTRATION	2180 MILVIA	2
CITY BUILDING MAINT.	1326 ALLSTON WAY	15
SENIOR CENTERS:		
NORTH	1901 HEARST AVENUE	16
SOUTH	2939 ELLIS	17
WEST	1900 6TH STREET	18
SOUTH BERKELEY CHILD CARE	624 BANCROFT WAY	19

EDUCATIONAL BUILDING LOCATIONS

<u>SCHOOL - DEPARTMENT</u>	<u>ADDRESS</u>	<u>No.#</u>
ADULT SCHOOL ADULT BASIC EDUCATION ADULT CAREER CENTER	1222 UNIVERSITY AVENUE	20
BERKELEY ARTS MAGNET K-6	1645 MILVIA STREET	21
BERKELEY HIGH EAST CAMPUS	2246 MILVIA STREET 1950 CARLETON	22 23
BERKELEY UNIFIED SCHOOL DISTRICT	2134 M L K JR WY	24
CAL PERFORMANCES	UCB	25
COLUMBUS 4-6	2211 7TH	26
CRAGMONT K-3	830 REGAL ROAD	27
EMERSON K-3	2800 FOREST AVENUE	28
JEFFERSON K-3	1400 ADA	29
JOHN MUIR ELEMENTARY K-3	2955 CLAREMONT AVENUE	30
KING JR. HIGH 7-8	1781 ROSE	31
LE CONTE K-3	2241 RUSSELL	32
LONGFELLOW 4-6	1500 DERBY	33
MALCOLM X 4-6	1731 PRINCE	34
MODEL SCHOOL K-6	2955 CLAREMONT	30
OXFORD K-3	1130 OXFORD	35
THOUSAND OAKS K-3	840 COLUSA AVENUE	36
UCB		37
UCB TELECOMMUNICATIONS OFFICE/COMMUNICATIONS SERVICES	2505 CHANNING WAY	38
VISTA COMMUNITY COLLEGE	2020 MILVIA	40
WASHINGTON K-3	2300 M L K JR WY	41
WILLARD JR HIGH 7-8	2425 STUART	42

UCB BUILDING LOCATIONS

<u>AGENCY - DEPARTMENT</u>	<u>ADDRESS</u>	<u>NO#</u>
ART MUSEUM	2626 BANCROFT WAY	61
CAL ADVENTURES	2301 BANCROFT WAY	62
CAREER PLANNING AND PLACEMENT CENTER	2200 BANCROFT WAY	62
CENTER FOR LABOR RESEARCH AND EDUCATION	2521 CHANNING WAY	61
CHILD STUDY CENTER	2425 ATHERTON	63
COMMUTE STORE-BERKELEY TRIP	2033 CENTER STREET	64
DISABLED STUDENTS PROGRAM	2515 CHANNING WAY	65
EXTENSIONS - UNIVERSITY		
CLASS AND REGISTRATION INFO.	2223 FULTON STREET	66
CORRESPONDENCE INSTRUCTION	2016 CENTER STREET	64
RECORDS AND TRANSCRIPTS	2223 FULTON STREET	66
FAMILY NUTRITION PROGRAM	700 ADELINE STREET	67
FINANCIAL AID	201 SPROUL	68
HOUSING AND DINNING SERVICES	2401 BOWDITCH	69
FAMILY APARTMENTS MANAGER'S OFFICE SMYTH-FERNWALD	2939 DWIGHT WAY	70
RESIDENCE HALLS MANAGERS' OFFICES		
UNIT I	2650 DURANTE AVENUE	61
UNIT II	2650 HASTE	69
UNIT III	2400 DURANTE AVENUE	71
CLARK KERR	2601 WARRING	72
DWIGHT WAY HOUSE	2524 DWIGHT WAY	69
MANVILLE	2745 BANCROFT WAY	61
PROSPECT	2347 PROSPECT	70
SHORB	2547 CHANNING WAY	65
STERN	HEARST AND HIGHLAND	73
INTERNATIONAL COMPUTER SCIENCE INSTITUTE	1947 CENTER STREET	64
INTERNATIONAL HOUSE	2299 PIEDMONT AVENUE	74
KALX RADIO	2311 BOWDITCH	69
LATIN AMERICAN STUDIES	2334 BOWDITCH	69

UCB BUILDING LOCATIONS
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<u>AGENCY - DEPARTMENT</u>	<u>ADDRESS</u>	<u>NO#</u>
OFFICES OF PRESIDENT AND REGENTS' OFFICERS	300 LAKESIDE DRIVE	77
PACIFIC FILM ARCHIVE	2625 DURANT AVENUE	61
PERSONNEL:		
PERMANENT CAMPUS EMPLOYMENT	2539 CHANNING WAY	65
STUDENT EMPLOYMENT PART-TIME AND TEMPORARY	2200 BANCROFT AVENUE	62
PHYSICAL RESOURCES	2000 CARLETON	75
SURVEY RESEARCH CENTER	2538 CHANNING WAY	65
UNIVERSITY PRESS	2120 BERKELEY WAY	76
UNIVERSITY RESEARCH EXPEDITIONS PROGRAM	2223 FULTON	66
VISITORS INFORMATION CENTER	2200 UNIVERSITY AVENUE	76

PUBLIC BUILDING LOCATIONS

<u>AGENCY - DEPARTMENT</u>	<u>ADDRESS</u>	<u>No.#</u>
ADELINE MERCHANTS ASSOC.	3300 ADELINE STREET	43
ADULT DAY CARE	1890 ALCATRAZ AVENUE	44
ALTA BATES/HERRICK HOSPITAL	3001 COLBY 2001 DWIGHT WAY	45
BERKELEY ASIAN YOUTH CENTER	1950 CARLTON	46
BERKELEY COMMUNITY LAW CENTER	3130 SHATTUCK AVENUE	47
BERKELEY/OAKLAND SUPPORT SERV	2100 M L K JR WAY	48
BERKELEY SYMPHONY	2322 SHATTUCK AVENUE	49
BLACK OAK BOOKS	1491 SHATTUCK AVENUE	50
BLACK REPERTORY GROUP INC	3201 ADELINE	51
CENTER FOR INDEPENDENT LIVING	2539 TELEGRAPH AVENUE	52
CHAMBER OF COMMERCE	1834 UNIVERSITY AVENUE	53
CODY'S BOOKS	2454 TELEGRAPH AVENUE	54
COMMUNITY MEMORY	2617 SAN PABLO AVENUE	55
ECOLOGY CENTER	2530 SAN PABLO AVENUE	56
HOUSING RIGHTS	3354 ADELINE STREET	43
PACIFIC FILM ARCHIVES	2625 DURANT AVENUE	57
SO. BERKELEY NEIGHBORHOOD DEVELOPMENT CORPORATION	1767 ALCATRAZ AVENUE	58
SAVO ISLAND MEETING ROOM	2017 STUART STREET	59
TECHNICA	3252 ADELINE STREET	58
YOUNG ADULT PROJECT	1720 OREGON STREET	60
YOUTH EMPLOYMENT SERVICES	1730 OREGON STREET	60

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ADDITIONAL BUILDING LOCATIONS

1. Continuing Education of the Bar
2300 Shattuck Ave.
2. KPFA Studio
1929 Martin Luther King Jr. Way
3. La Pena Cultural Center
3105 Shattuck
4. Supervisor Warren Widener's Office
2001 Center
5. World Institute for Disability
1720 Oregon



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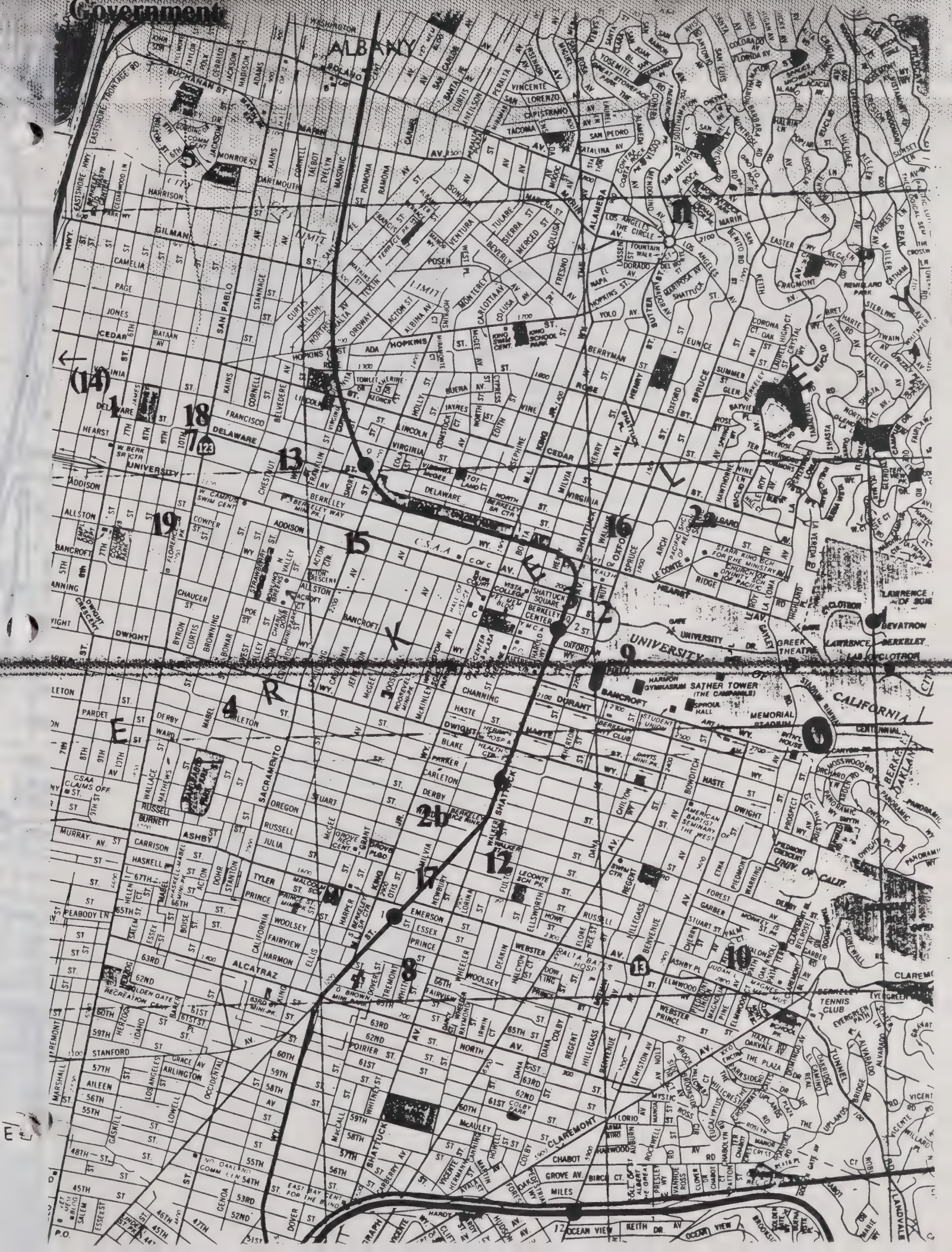
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SECTION V A
MANAGEMENT OPTIONS FOR
PUBLIC, EDUCATIONAL AND GOVERNMENT ACCESS

EXECUTIVE SUMMARY

I. GENERAL FINDINGS:

Section IV recommends that the operator be required to set aside PEG access channels and to provide funding for access equipment and facilities. This Section discusses options for the management of these resources.

In considering the options:

1. Program policies for public access differ markedly from those for governmental and educational access.
2. Management responsibilities for PEG access can be assigned to more than one entity.
3. Management functions can be separated from production.

The recommendations are based on the following findings:

1. There is virtually no support for Bay Cablevision to manage public, educational or governmental access.
2. No existing organization seems to be a candidate for assuming management of public access.
3. The access facilities must be located in Berkeley.
4. Heavy demand for PEG access exist.
5. The resources to be available for access will be limited, and therefore, the management model should facilitate resource sharing and ensure equitable access by all user groups.

The options discussed include management by a nonprofit access center, a school, the City, and an educational consortium.

RECOMMENDATIONS:

1. **Establish a Nonprofit PEG Access Center** to coordinate the use of the PEG channels, to schedule the channels, to oversee playback, to ensure the equitable use of all facilities and equipment available for access, to conduct promotion and outreach for the channels, the organization, and for all programming.

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2. **Establish Formal Mechanisms for Input** into the policies and procedures of the nonprofit by the public, educational and governmental users.
 3. **The City government** should establish a mechanism to develop the government programming policies and priorities for the government channel(s) and to manage a limited amount of production equipment at City Hall. The City could also contract with the Nonprofit Access Center for additional equipment and editing facilities, training and staff support.
 4. **An educational consortium** composed of Berkeley Unified School District, Vista Community College and UCB should be established to develop the policies and programming priorities for the educational channel(s). Each would be responsible for its own program production and could also contract with the Nonprofit Access Center for additional equipment and editing facilities, training and staff support.
 5. **Planning Process for the Access Center** involving representatives from city government, educational institutions, community organizations, subscribers and residents of the City of Berkeley should be instituted to design and incorporate the nonprofit access corporation.
 6. **City and Educational Consortium Planning** should occur simultaneously.
 7. **Funding** for the nonprofit should include:
 - a. adequate facilities, equipment (to include maintenance and replacement over the life of the franchise) and channel capacity for PEG access provided by Bay Cablevision.
 - b. a grant from Bay Cablevision to provide support to the nonprofit access center.
 - c. the 5% franchise fee (or its equivalent from the general fund) to support the Nonprofit Access Center and for the operations of the PEG channels.

SECTION V

MANAGEMENT OPTIONS FOR PUBLIC, EDUCATIONAL AND GOVERNMENT ACCESS

I. INTRODUCTION:

Section IV presented the recommendations for public, educational and governmental (PEG) access. These recommendations included the set aside of channels for PEG use and the provision of facilities and equipment for PEG access users.

This Section presents options for the management of these access resources. The report is divided into the following subsections:

- II. General Findings
- III. Public Access: Findings and Options
- IV. Educational Access: Findings and Options
- V. Government Access: Findings and Options
- VI. Recommendations for PEG Access Management

To assess the management options presented in this report it is important to keep three factors in mind:

- A. Program policies for public access differ markedly from those that can be set for educational and governmental access. It is important to keep in mind that the management of production facilities can be separated from the establishment of policies and procedures. For example, in Honolulu there is one nonprofit access center responsible for the management of PEG access, but local government and an educational consortium set their respective program policies.
- B. Management responsibilities for PEG access can be assigned to more than one entity (see page 11).
- C. The role of any access center and the costs associated with programming the access channels is significantly affected by the way PEG programming gets produced. For example, some access centers facilitate the programming by providing training and support to outside groups which actually produce the programs. This model produces the most programming at least cost. Other centers serve as production units, providing the production crew and the user groups provide the program content, a more costly approach. Frequently, a center will combine both approaches. (see page 12). Which approach best serves Berkeley must be addressed during the subsequent planning process.

II. GENERAL FINDINGS:

Information for this section was gathered from the sixty one interviews, seventy eight surveys and six workshops conducted by the Consulting Team. In addition the Team drew on the experience of Kathleen Schuler who has conducted research into access centers nationally and set up access management entities throughout California and Hawaii. (Also see Appendix G: "A Guide to Incorporation," "City Programmers" and "Cable and Education".)

This section summarizes the general findings that will influence the selection of a management model appropriate for the City of Berkeley.

A. Access Not Managed By Cable Operator:

The cable operator has not demonstrated a strong commitment to public, educational or governmental access. Further, no one participating in the needs assessment supported the concept of access managed by the cable operator. Of the seventy seven returned surveys, only three reported ever using the El Cerrito studio, and those commented on the inadequacy of the facility and equipment and on problems with use. Nationally, there has been a major shift away from cable operator management of access since the passage of the Cable Communications Policy Act of 1984. Therefore, this option is not presented in this report.

B. No Existing Organization To Manage Access:

There seems to be no existing organization positioned to assume full management of public, education and government channels. (See page 3.) Therefore, a management structure will have to be created anew and/or through partnerships with a number of existing institutions. In either case the City will want to establish a planning process to develop the appropriate managing structure once the resources for access are known.

C. Need for Funding:

The availability of startup and ongoing operational funding as well as funds for equipment and facilities is a major factor in the assessment of management options.

Currently, the operator provides no funding for access. In Berkeley the franchise fee of 5% now generates approximately \$190,000 a year. The fee is divided between the City's general fund, which gets 3%, and a special undergrounding fund which gets the remaining 2%.

Further, there are limited video facilities within the City of Berkeley available for access users, especially members of the public and government agencies. Of those producers responding to the survey, two-thirds had utilized facilities located outside the city, private production houses and friends' equipment.

Therefore, the options presented here are based on three assumptions:

1. The City will seek public, educational and governmental access channels and funds for PEG equipment and facilities from the operator as part of the franchise renewal process.
2. The resources available for access will be limited. The ideal management structure must serve a number of different user groups (i.e., PE &/or G) and facilitate the sharing of the resources that exist in Berkeley.
3. The City will provide some operational support for access from the franchise fee and/or the general fund.

D. Access Center To Be Located in Berkeley:

There is a very strong feeling that the access facilities be located within the City of Berkeley. Therefore, options that involved agencies located outside the city were not considered.

E. Heavy PEG Access Demand:

In spite of the lack of access channels or production facilities in the City of Berkeley, the majority of the participants in the needs assessment (1) understood and were supportive of access, and (2) presented strong evidence of demand for and use of access channels and facilities. A large number of individuals and organizations (61% of the survey respondents alone) reported having some degree of video expertise. Therefore, the management model should address PE and G and should anticipate heavy demands for facilities, equipment and support services from all three sectors.

III. PUBLIC ACCESS:

This section summarizes those finding that are pertinent to public access and presents three management options for public access. These findings supplement those presented in II above.

A. Findings:

1. **Accessible Access Facilities:** There was much concern that the access facility(ies) be geographically and physically accessible to the entire community.
2. **Neutral Nonprofit Access Center:** Respondents preferred a neutral, independent nonprofit management entity for public access. They expressed concern that the cable operator and the City, in particular, would suppress controversial programming and/or limit access to main stream organizations.
3. **Community Input:** Community input into the formation of policies for and the management of public access was stressed.

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4. **Minimal Government Role in Public Access:** The City must ensure that it has maximum protection from liability for programming on the public access channel and from potential First Amendment violations. Therefore, management structures for public access should minimize the government's role
 5. **No Existing Organization To Manage Public Access:** No neutral, not for profit agency surfaced during the needs assessment that was interested and/or capable of managing public access channels or facilities. No educational institution stated an interest in managing a public access channel or facility. (See IV below for additional discussion.)

In the past East Bay Media Center indicated an interest in managing access for Berkeley. However, since they chose not to participate in the needs assessment, it is not possible to assess their potential role. KPFA may be interested in co-locating production facilities, however. No other nonprofit agency in Berkeley seems to have a mandate compatible with that of an access center.

B. Management Options for Public Access:

1. **City Management:** Several cities in California have assumed responsibility for public access, putting in place policies which forbid program content control (Ex., Torrance, Lakewood). Either an existing department is assigned (most frequently the City Manager's Office, Parks and Recreation or the Library) or a new division created to manage facilities and to program the public channel (ex., Cable Communications Office, City of Torrance). This model, while infrequent, occurs most often when the community and city government share a single channel or facility.

Pros: Sharing of resources can be facilitated. Some city departments, like Parks and Recreation and the Library, already have educational, recreational and informational programs for the public, frequently including video production. City councils sometimes feel this model guarantees accountability for public access.

Cons: The City is most exposed to liability for programming and to potential First Amendment Violations, no matter what policies are in place. And, that exposure is the same no matter which department is assigned responsibility. Conversely, the community is concerned that government control of public channels would result in access only by mainstream organizations.

2. **School Management:** A school is sometimes given the responsibility for public access, especially when the public shares a channel with education and/or when the school has video facilities and training programs in place. Usually, a public advisory group or a producers' group is set up to advise on policy. Generally, community colleges are more open to public access than are school districts and four year institutions. The most active community college managed public access centers in Northern California are located at De Anza, Los Altos and Peralta Community Colleges. In some communities the school just provides facility space and/or training (ex., Sacramento Community Access Foundation contracts with the local community college for production training.)

Pros: Existing resource can be leveraged (for example, facilities and training). Schools frequently have significant experience in video production. Community colleges, especially, are geared to working with the public on both a credit and noncredit course basis. With dropping enrollment the public schools may be able to offer sites for facilities. City Councils, looking to ensure accountability, sometimes feel more comfortable placing public access in another public institution rather than in a nonprofit.

Cons: The school's mandate and own programming needs frequently preclude full access by the public. Schools frequently do not wish to take on responsibility for public access programming. School bureaucracies can make access management cumbersome and personnel costs and hiring practices usually increase costs of operation. Some members of the community feel uncomfortable in a school environment (for ex., seniors on a high school campus, those with limited education at UCB). Most importantly, representatives from UCB, the school district, Vista or the community college district were not interested in managing public access at this time.

3. **Nonprofit Access Corporation Management:** Under this model the City creates or designates a nonprofit access corporation to assume responsibility for part or all of the management of the access channels. The most active in Northern California are Sacramento Community Cable Foundation, Mtn. View Community Television and Davis Community TV while Pasadena, Beverly Hills, Santa Monica, El Monte, and Monrovia are just a few of the Southern California cities with nonprofit access centers. The City of Los Angeles and Richmond have just begun planning.

Cities are adopting this option with increasing frequency. A 1988 survey conducted by the Foundation for Community Service Cable Television identified 44 California cities with nonprofit access centers, representing 23% of all cities with any access channels available for the public and a majority of those cities with active public access programs. In comparison there were only nine active in 1983.

Pros: The nonprofit access corporation has access as its sole mandate. If established as independent from the city, it provides the city with maximum protection against liability for public access programming and First Amendment violations. Compared with city government and schools, the nonprofit has minimal bureaucracy and has greater flexibility in fundraising. In the case of lawsuits the nonprofit has relatively shallow pockets. And, it can take on the role of a neutral, third party leadership role to bring together organizations that have little history of working cooperatively.

With proper safeguards built in for community input and accountability, the nonprofit model for public access was preferred by participants in the needs assessment.

Cons: In the absence of an existing agency able to take on public access, this model would require the investment of time and resources in the planning and startup of a new organization. City Councils are concerned about accountability of newly established and untested nonprofit access centers. A nonprofit access center is particularly vulnerable if it lacks the support of the City Council and a stable funding base.

IV. EDUCATIONAL ACCESS:

This section summarizes the findings particularly relevant to educational access management and presents four management options. These findings augment those described in II above. (For a full discussion of educational needs, please refer to Section IV: Community Needs Assessment and Appendix D-8.)

A. Findings:

1. **Unusually Heavy Educational Needs:** Berkeley is unusual in that few cities its size have a k-12 school district, a community college and a major university all within its city boundaries. Therefore, the City must weigh the significant programming needs of three very strong educational institutions while negotiating a franchise for a city with a 106,000 population.

2. **Input Into Channel Management; Program Content Control:** All three institutions have identified a wide range of very specific programming needs for their respective institutions: telecourses, contract education, student productions, informational and educational programs for residents, and delivery of in-school curriculum for their respective institutions. Each institution is concerned that (a) they have adequate input into the management policies of the educational channels and (b) that they have control over their own programming.
3. **Cooperative Projects Identified:** Educators also identified a number of critical areas where joint ventures and resource sharing could be facilitated through cable television: curriculum development and delivery, advanced courses for high school students, sharing of existing curriculum materials, and access to UCB's teleconferencing resources, for example. Therefore, the management model should facilitate such cooperation.
4. **Existing Resources Vary:** The resources of each institution vary dramatically:
 - a. **UCB** has significant video production facilities and equipment, access to satellite programming, and staff to support its own programming plans for an access channel through the Media Center located in Dwinelle Hall. It has plans to utilize cable and to work cooperatively with other schools, but it does not want to manage an educational access channel.
 - b. **Vista Community College** has no production facilities of its own but has access to video production facilities through Peralta College TV and to the PCTV Channel, which is distributed throughout the Bay Cablevision, Cable Oakland, and United Alameda service areas. However, for many of its plans Vista is relying on having access to the educational access channels and facilities in Berkeley. Vista's ability to manage an educational channel has not been explored with its leadership.
 - c. **Berkeley Public Schools** has no video production capabilities and little in-house video expertise. It is dependent on resources negotiated in the franchise agreement and support from the other schools and from the entity(ies) managing access.

B. Management Options for Education Access:

In some communities only one educational entity is given the access resources, either because it is the dominant institution or the only one interested in using cable TV. Since neither situation exists in Berkeley, this option is not discussed.

1. **Multiple Educational Access Centers:** some communities channels and equipment are given to each educational institution, which then controls its own programs and channels.

Pros: Each institution has maximum control over the development and utilization of its channels. It is a simpler management approach, embroiling each school only with its own bureaucracy. Each entity can develop its own management structure.

Cons: This model is not be the most cost effective. It is unlikely that there will be sufficient resources to divide among three large institutions while providing facilities and equipment for public and governmental access. The resource sharing and joint ventures which will be necessary for education access to work in Berkeley may not occur in the absence of joint management of educational channels.

2. **Educational Management Consortium:** An educational consortium is formed to manage a shared facility, resources and channels dedicated to educational use. The consortium may be a nonprofit agency (ex., the Sacramento Educational Consortium) or a joint powers agreement (ex., the Lakewood Educational Technology Consortium). (See Appendix G: "Education and Cable.")

Pros: Consortium facilitates cost-effective use of limited access facilities and promotes cooperative ventures. Shared programming responsibilities usually ensure that available channels are filled.

Cons: Consortia create another administrative level and requires cooperation from institutions that have little or no history of joint venturing or political cooperation. It requires that each school relinquish a degree of control to a yet unknown management entity.

3. **Educational Policy Consortium:** In this model the educational consortium sets the policies and allocates channel time for its members, but does not actually manage an access facility or access channels. Each school may produce its own programming (as in #1 above) or utilize the

equipment in a central nonprofit access center or another institution that manages the facilities and schedules the channels. On Oahu the facilities and channels for education are managed by the nonprofit access corporation, but the educational consortium set policies and control their own program content.

Pros: Since the scope of responsibility for the Policy Consortium is less than that under #2, it is less costly (usually requiring no paid staff, for example). It allows the schools to exercise control over educational policy and their programming and to share programming responsibilities, but permits each school to control its own means of producing programs or to use the resources provided by a nonprofit access corporation or another institution.

Cons: Similar to "#2 - Cons" above, the policy consortium does not have control over the actual management of any external facilities it uses.

4. **Central Nonprofit Access Center:** In this model the educational institutions participate in an umbrella nonprofit access center that manages facilities and channels on behalf of its public, educational, and/or government members. The Pasadena Community Access Corporation is an example of this model.

Pros: This provides for the most cost-effective utilization of facilities and equipment and is most commonly used when there are limited resources and/or when a neutral party is needed to coordinate use of production resources. By having a central facility program the channels, channel time can be more effectively utilized.

Cons: All participating parties must relinquish some degree of control to an unknown management entity and cooperate with other institutions to fulfill its organizational objectives. Participating institutions may have very different mandates, resources, and/or programming goals. This is particularly difficult if the member institutions have little or no history of cooperation. The nonprofit requires startup costs and planning time as well as ongoing operational expenses.

V. GOVERNMENT ACCESS:

This section summarizes the findings most relevant to the management of government access and presents three options for management. The findings of this section augment those presented in II above.

A. Findings:

1. **Government Access Growing in State:** Local governments are now one of the most active users of access channels. In the 1988 survey conducted by the Foundation for Community Service Cable TV over 56% of the cities reported actively using cable. Locally, Council meetings in Oakland, Mtn. View, and Hercules are cablecast on a regular basis; Richmond has established a Cable TV Office to oversee municipal programming.
2. **City Tradition of Community Involvement:** The City of Berkeley has a tradition of citizen involvement in local government and open decision making processes.
3. **Strong Interest in Municipal Programming in Berkeley:** Both community and municipal respondents expressed a strong interest in a government channel and municipal programming. Members of the public were especially interested in the coverage of City Council, Planning Commission and other key governmental meetings. City staff identified included information on city services, delivery of Parks and Recreation classes, public education on crime and fire prevention (including expansion of the Berkeley Safe Neighborhood Committee), inter-departmental information, provision of a municipal calendar, fire personnel training, and the delivery of videotext information services to the public (see Appendix G: "Rise of the 24 Hour City Hall").
3. **No Video Resources:** City government lacks video production facilities or expertise.

B. Structural Options For Government Access:

1. **City Access Center:** In this model an existing city agency or a new division is created to manage the government use of the access channel(s), production facilities. Access management is sometimes placed under:
 - a. **The City Manager** who has responsibility for all city agencies and who is responsible for cable franchise enforcement and telecommunications for the City.
 - b. **The City Library** that serves as the major public information source for the City.

- c. **The City Clerk** who has responsibility for the maintenance and dissemination of information for the legislative branch of the City.
- d. **Park and Recreation** that provides a wide range of educational, recreational and support services to the citizens.

Access management is usually not placed under the jurisdiction of Fire or Police, for their internal information and communication needs usually pre-empt other agencies' use of the channel or production resources. The setting aside of cable TV bandwidth for police and fire and emergency information services should be negotiated separately from other access requirements.

Pros: Policies for government access differ significantly from public access. This model facilitates clearly differentiated policy development for each. City government is usually reluctant to turn over policy and significant responsibility for establishing program priorities to a non-government entity. City government is best able to coordinate and encourage the use of government channels by other municipal agencies.

Cons: Again, multiple management and access facilities add to the cost of providing access services and minimize cooperative ventures among user groups.

- 2. **City Access Policy Agency:** A city agency (see above) or a committee representing various departments is designated to develop government access policies and procedures and to identify programming priorities. Most frequently, the City Manager's Office takes the lead. Actual program production is contracted out to a centralized access center or to another production unit. For example, the City of Mtn. View contracts with the nonprofit access center for the coverage of city council meetings and a given number of hours of other programming.

Pros: The city government can participate in a centralized production unit (like the nonprofit access corporation) or contract out for production services while controlling policies for the government channels and setting government programming priorities. Utilizing other production facilities, especially those of a central access facility, can be cost effective for the city.

Cons: City government usually wants to maintain control of production facilities, and it is reluctant to turn over any significant control of program production to an outside agency. Not having equipment on site (i.e., the Council chambers) makes coverage of meetings more cumbersome.

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3. **Central Nonprofit Access Corporation:** In this model the government participates as a member agency in the central nonprofit PEG access corporation. This model is most common when local government shares a channel with other user groups, access facilities and equipment are limited, and/or when a neutral coordinating entity is needed. The County of Oahu, Hawaii, has established a nonprofit access corporation to coordinate public, educational and governmental access.

Pros: See IV. B. 4. above.

Cons: If the nonprofit is responsible for public access, and if city government has a significant number of voting seats on the Board, the city exposes itself to First Amendment violations and liability. Given the city's role in the franchise enforcement and as a potential funder of the access center, the city may exert undue influence over the operations of the organization. Also see IV. B. 4. above.

VI. RECOMMENDATIONS:

This section identifies the basic functions involved in managing access, gives three examples of how these function might be addressed, and makes recommendations for the management options for Berkeley.

A. Discussion:

1. **Management Functions:** The management model for access must address the following functions:
 - a. establishing program and channel policies
 - b. establishing and enforcing procedures
 - c. allocating channel time
 - d. setting programming priorities
 - e. scheduling the channel(s)
 - f. program playback on the channel(s)
 - g. provision of training
 - h. provision of production assistance
 - i. production of programs
 - j. outreach and promotion
 - k. supervision of access staff and other organizational management functions.
 - l. resource development

One management entity can be given the responsibility for all the above functions, or they may be delegated to a number of institutions. For example:

- a. **Nonprofit Manage All for PEG Access:** A nonprofit access organization could be created to manage all PEG channels, to provide facilities, schedule the channel and provide playback services, provide basic video production training, perform all administrative functions and to conduct outreach and promotion.
 - b. **Nonprofit Manage All for Public Access Only:** The nonprofit access organization could serve all the above functions, but only for the public channels. The City and an educational consortium could manage their own respective dedicated government and educational channels.
 - c. **Divide Management Functions:** The nonprofit access center could serve all of the functions in #1 for the public, but contract with Vista to provide training through its credit and/or noncredit courses. City government and the educational consortium could establish the policies and programming priorities for its dedicated channels, but contract with the nonprofit for production facilities and assistance.
2. **Program Production Responsibilities:** The basic model adopted for program production significantly affects the role of the access center, the staffing pattern and the costs associated with programming the channel. For example:
- a. **Access Center As Facilitator:** Many access centers provide training and some production support, but the users write the scripts, supply the talent, operate the cameras - in short, produce the programs. This is regarded as the "pure" public access model. This model produces the most programming at the lowest costs. Some argue that program quality can be a problem.
 - b. **Access Center as Production Unit:** On the other hand, some centers, particularly those serving government and education, have adopted a "local origination" approach, serving as a production unit for the users. The center provides the production crew while the user group provides the program content (the council meeting, the event, on air talent, etc.). This creates more costly per program costs and limits the amount of programming that can be produced with available staff.

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In practice most public access centers lean towards (a) while creating some productions of their own while government and educational access rely more on professional production staff (b).

How the management responsibilities are assigned and which program production approach is appropriate are two critical factors that must be resolved during the post-franchise planning process.

B. Recommendations:

1. **Establish a Nonprofit PEG Access Center:** A nonprofit access center should be established to coordinate the use of the PEG channels, to schedule the channels, to oversee playback, to ensure the equitable use of all facilities and equipment available for access, to conduct promotion and outreach for the channels, the organization, and for all programming.
2. **Community Input:** Formal mechanisms be established to ensure appropriate input into the policies and procedures of the nonprofit by the public, educational and governmental users.
3. **Municipal Access:** The City government should establish a mechanism to develop the government programming policies and priorities for the government channel(s). Some equipment should be allocated for City use (for coverage of Council and other meetings), but the City would also have access to equipment and editing facilities housed at the Nonprofit Access Center. The City could (a) provide its own production staff or (b) contract with the nonprofit to provide production and training services for city agencies.
4. **Educational Access:** An educational consortium composed of Berkeley Unified School District, Vista Community College and UCB should be established to develop the policies and programming priorities for the educational channel(s). Some limited production resources should be placed in Berkeley High School for student productions and basic production, and the District would also utilize the resources at the Nonprofit Access Center for more complex programming (i.e., curriculum units). Vista could also use the Nonprofit Center to supplement the production resources it has through Peralta College District. UCB has its own production facilities and would provide its own programming for playback on the educational channels.

5. **Planning Process for the Access Center:** A planning process should be established after the franchise is negotiated that will involve representatives from city government, educational institutions, community organizations, subscribers and residents of the City of Berkeley to design and incorporate the nonprofit access corporation. The planning process, incorporation of the organization and recruitment of the Board of Directors, and the recruitment of an Executive Director should take approximately nine months.
6. **Government and Educational Access Planning:** At the same time the City and the educational consortium should each institute internal planning processes to develop their respective access related plans.
7. **Funding:** The planning for the nonprofit must address the short term and long term funding of the organization. It is recommended that to provide a stable resource base for the nonprofit:
 - a. The City should require Bay Cablevision to provide adequate facilities, equipment (to include maintenance and replacement over the life of the franchise) and channel capacity for PEG access.
 - b. The City seek a grant from Bay Cablevision to provide support to the nonprofit access center.
 - c. The City set aside the 5 % franchise fee (or its equivalent from the general fund) for the Nonprofit Access Center and for the operations of the PEG channels.
 - d. The City set aside funds to support its own programming needs.

C. Costs:

Please refer to Section VI for a discussion of the financial impact of the access recommendations. This discussion outlines the areas of cost when instituting the access management recommendations.

1. **Planning for the Nonprofit Access Center:** Expenses include the hiring of a consultant to assist with the planning process and to prepare the documents for incorporation. This cost is dependent on the level of planning support that can be provided by the City and other participants. Filing fees for incorporation are approximately \$500.

2. **Startup Costs:** Expenses include the recruitment of the Executive Director, hiring and training of key staff and recruitment and orientation for the Board plus facility and office rental, staff salaries, equipment and furniture purchases, and general administrative support. Facilities and improvements are the greatest variable for budgeting purposes, depending on whether space can be donated or co-located with other production facilities.
3. **Ongoing Operational Costs:** In addition to salaries, rent, and the usual costs of running a nonprofit, the organization will incur costs associated with production (supplies, maintenance), training, outreach and promotion.

It is difficult to project operational costs because of the large number of variables: the scope of the center's responsibilities; the number of channels to be programmed; whether facilities are built, rented or donated; the volume of users; the number of staff and level of expertise; the amount of programming the center produces vs. the amount produced by its users, etc..

However, ongoing operational budgets for nonprofit access centers in California range from \$20,000 to \$500,000 a year, with an average being in the \$125,000 to \$150,000 range. Be aware that most of these budgets reflect the resources available and not necessarily adequate budgets for the management and programming of a channel.

SECTION V B

FRANCHISE ENFORCEMENT

I. INTRODUCTION

This report summarizes the administrative and enforcement reorganization the City may wish to implement to support the proposed new cable television franchise agreement. The report begins with a brief review of Berkeley's current staffing structure and ends with a review of three staffing scenarios recommended for City consideration to address the expanded regulatory and franchise activities anticipated in the new franchise.

Central to these recommendations are the customer service provisions proposed for the new franchise agreement between the City and the cable operator. The list of service provisions (see pages 3 to 5 below) includes all of the customer service standards recommended in the customer service report (Section III E and Appendix D), the standards recommended by the National Cable Television Association (NCTA), and performance standards required by state and federal law. The analysis in the following sections assumes:

- A. that all of these performance provisions will be adopted into the new franchise agreement.
- B. that the cable system will be rebuilt as described in the technical report to a degree that requires extensive changeout of the existing cable plant, home wiring and service taps.

II. CURRENT STATUS OF FRANCHISE MONITORING

A. Franchise Monitoring Activities

Due to the limited provisions and enforcement standards of the existing franchise agreement and municipal ordinance, the City has not had the jurisdiction to develop a comprehensive regulatory action plan. Thus, in the past cable television regulation and franchise monitoring and enforcement has been handled predominately on a reactive, complaint by complaint basis.

Under the current regulatory and enforcement activities, the City has routinely monitored cable company performance in five key areas:

- 1. customer complaints
- 2. franchise fee payments
- 3. utility district fund collection, and monitoring of underground cabling
- 4. miscellaneous franchise matters (insurance certificates, letters of credit, etc.)

B. Current City Staffing

The City of Berkeley handles the monitoring and enforcement of the cable franchise requirements on a limited part-time basis. Specifically, regulatory duties are shared between the City Manager's Office, the Public Works Department, and the Finance Department. Sean Gordon, formerly a Senior Management Analyst and now Assistant City Manager, monitors compliance and performance of the City's cable television franchise. Such activities include the supervision or handling of any cable related activities such as participating in franchise renewal negotiations, reviewing breeches in Grantee performance, and the preparation of status reports and recommendations. Furthermore, when situations arise requiring legal interpretation of the franchise agreement, Mr. Gordon will correspond and coordinate enforcement activities with the City Attorney's office.

Jeff Baker, a Management Analyst in the Public Works Department, handles the majority of public complaints which come to the City either by telephone or written word. Complaints are routinely filed in a dedicated folder kept in the Public Works Department. When necessary, the Assistant City Manager follows up on complaints.

The City's Finance Department handles the franchise fee payments that Bay Cablevision submits on a quarterly basis. The Finance Department also handles the financial processing for underground cabling.

It should be noted that both Sean Gordon and Jeff Baker have a variety of other duties which occupy the majority of their time. In fact, less than 10% of their time is spent on CATV administration.

Where situations arise requiring legal interpretation of the franchise agreements the Assistant City Manager will correspond and coordinate enforcement activities with the City Attorney's Office.

III. DUTIES RELATED TO FACT-FINDING AND RECORD KEEPING

As noted in the Customer Service Appraisal Report (Appendix C), CSC proposes a number of customer service franchise provisions for inclusion in the renewed franchise documentation between the City and the cable operator.

The following is a compilation of the major customer service franchise provisions which were recommended in that report. Included with these recommendations are a number of additional standards which were adopted by the National Cable Television Association (see Appendix C for CSC's letter dated April 6, 1991) and those mandated by state law since the customer service assessment report was presented to the City.

In addition to the recommended customer service provisions, a number of service related provisions from the existing franchise agreement have also been included in the list. It should be noted that the franchise provisions in the list represent those requirements which only address customer service issues, and does not include provisions related to technical requirements or other provisions to be adopted by the City.

Note that the listed franchise recommendations have been categorized by how often we recommend the operator's performance be checked. The categories are broken down into monthly, quarterly, annual sections (with the annual section provisions to be applied on an as needed basis).

A. Recommended Franchise Provisions and Frequency of Inspection

1. Monthly Reporting:

- a. Grantee to connect incoming telephone calls from subscribers with live company representative within thirty seconds. City to monitor Grantee's telephone response times.

2. Quarterly Reporting

- a. Grantee shall respond to and resolve customer service calls within a 24 hour time period. Minor problems not affecting all channels may be resolved within 48 hours.
- b. Grantee shall submit quarterly reports of service call activity, subscriber complaints and telephone response times to the City.
- c. Grantee shall offer a maximum of a four hour scheduling window for all service calls.
- d. Grantee shall install and maintain an emergency override system which has the capacity override all video and audio channels. Such system to be tested on a regular basis.

3. Annual Reporting or Verification

- a. Grantee shall offer credit to subscribers for outages over 4 hours or during outage of a major portion of subscriber's daily viewing time.
- b. Grantee shall maintain office service hours for billing and installation for a minimum of 8 hours per day Monday through Friday and 4 hours on Saturday.
- c. Grantee shall be able to address subscriber complaints and problem calls on a sixty (60) hour per week basis.

- d. Grantee shall maintain telephone answering capability with live (non-taped) representative 24 hours a day providing at least emergency referral information.
- e. Grantee to provide written notice to City and customers of any rate adjustments at a minimum of 30 days prior to enactment. City maintains the option to enact further rate controls in accordance with Federal and State law.
- f. Grantee shall maintain 24 hour emergency repairs including weekends and holidays.
- g. Grantee shall provide all subscribers with information on all services and fees of the company on an annual basis. Information shall also include company identification including telephone numbers and address.
- h. Grantee shall provide privacy customer rights information in accordance with local, state and federal laws.
- i. Grantee shall provide information to all subscribers about parental control devices on an annual basis.
- j. Grantee shall provide information on all conditions of service upon initial installation.
- k. Grantee shall provide information on input selector switch (A/B switch information in addition to Federal requirements for notification. Such information shall also be posted in the customer walk-in offices of the Grantee.
- l. Grantee shall provide written information annually to subscribers describing complaint resolution procedures. Notice shall include information about consumer's ability to contact the Grantor for grievances related to unresolved service problems.
- m. Grantee shall not discriminate between subscribers related to any provisions of cable services or fees or charges.
- n. Grantee shall afford all cable customers with a three day right to rescind an installation order.
- o. Photo identification on all field personnel and subcontractors shall be maintained by Grantee. All vehicles used in relation to cable servicing shall be properly identified.

- p. Grantee shall provide an annual fiscal report to the Grantor which includes a CPA verified gross revenue calculation of Grantee's franchise related revenues. Grantee to allow City to inspect financial records of company upon request.
- q. Grantee shall remove any resident based equipment upon termination of cable service.
- r. Grantor maintains the right to review Grantee's EEO records and review for consistency with local, state and federal laws.
- s. Grantee shall not arbitrarily refuse service to any resident of the City.

B. Estimation of Staff Hours Necessary to perform Duties Itemized Above.

It is obvious that the franchise provision modifications of the renewed franchise agreement will increase the need for the City to delegate staff time for franchise monitoring and enforcement.

Furthermore, a substantial rebuild of the existing cable plant at some time in the future will most certainly generate an increase in customer correspondence to the City, as the rebuild construction activities will effect all subscribers (e.g. cable change out, converters, undergrounding, etc.).

1. Complaint Handling

The City currently does not keep complete records of all contacts with the public regarding cable TV. It is imperative that the City do so. CSC recommend that the City begin using a simple complaint form for recording complaints. CSC's experience in providing cable television customer complaint services in the cities of Santa Ana and Beverly Hills has shown that, on average, a typical cable television complaint call requires approximately 15 minutes to handle over the phone and approximately 5 to 10 minutes to document. Time is also required for follow-up with the residents, to assure that problems have been resolved. Such follow-up will add an additional 15 to 20 minutes for at least two thirds of all complaint calls made to the City.

In cases where complaints have been filed via letter, additional time is required during the follow-up to draft correspondence. When appropriate, copies should be sent to the Mayor and Council support office. Telephone calls, mixed messages, miscommunications, and difficulties getting the correct information from all parties involved can easily consume additional hours per week.

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An analysis of the customer complaints on file with the City of Berkeley between April 1987 through September 1989, reveal an average of 10 calls per month. Taking into account that the City will implement the recommendation for incorporating a standard complaint form and log into its complaint handling activities, we estimate that a rough total of 1.25 hours per week of staff time would be needed to handle telephone complaints at Berkeley's current activity level. However, additional time may be needed, depending on the nature of the complaints, the follow-up required, and the likelihood that construction and maintenance activity will increase.

For example, the City of Beverly Hills which has a subscriber count of only 9,000, received 1,200 complaints for the 12 month period following the renewal of its franchise. Thus, factoring in the time required to handle each complaint and follow-up, we estimate that the total weekly time for complaint handling and documentation will range from 10 to 15 hours per week.

2. Telephone Response Time

Telephone response time monitoring is a fundamental component of prudent customer service enforcement practice. Telephone response time monitoring normally takes less time than customer complaint handling. This routine exercise only requires the time it takes to dial the call, wait for a response, and tabulate the results. It is recommended that the City attempt approximately 50 calls per month or 12 per week, yielding an average staff time expense of approximately 2.0 hours per month.

3. Other Enforcement Activities

We mentioned earlier that the Assistant City Manager handles other types of cable television concerns. In addition to the examples previously discussed, this position is also the chief liaison between the City and the cable company. Problems related to easements, rights of way, rights of entry, cable drops to public buildings, etc., require additional and often difficult to budget time. Often these issues require special coordination of staff members' schedules due to the requisite attendance at cable related meetings. Those meetings will most likely approximate ten hours per week during peak periods of cable activity.

We estimate that a prudent and reasonable franchise regulatory administration scheme, as outlined above, would require 6 to 10 hours per week of skilled "administrative intern" duties per week; 14 to 20 hours of "management analyst" duties; and a minimum dedication of at least 10 hours of "management" duties per week.

Furthermore, for the department that is assigned cable television regulatory duties, the primary staff person can expect to devote approximately 2 hours per week for follow-up correspondence and the reading of reports related to the cable television enforcement activity.

We recommend that an outside consultant handle the technical testing items identified in Section III C, because specific engineering skills are required to interpret the testing data. We estimate that 60 hours per year be allocated for technical oriented consulting. Additional discussion on this and the associated costs are presented in Section VI.

Finally, a prudent administration plan requires that the results of all annual and quarterly performance audits be compiled into a comprehensive annual report that could be shared with the City Council and the cable operator. We estimate that approximately 40 hours of management level staff time and 20 hours of intern-level time be allocated for this responsibility.

In summary, we have identified the following allowances:

<u>REGULATORY ACTIVITY</u>	<u>WEEKLY HOURS</u>	<u>SKILL LEVEL</u>
Complaint handling & resolution	14 to 20	Intern
Routine regulatory review	6 to 10 10 or more	Intern Mgmt.
Administrative supervision	2	Mgmt.
Annual report compilation	1.2*	Mgmt.
Technical consultation	1.2*	Consult.

** Figures are based on a total of 60 hours per year estimated to complete these tasks

C. Review of Staffing Scenarios

To ensure competent franchise administration services the City should dedicate staff who possess a current and comprehensive understanding of the provisions of the franchise agreement; a general knowledge of current regulatory, legislative, and judicial events effecting cable and telecommunications policy; and basic interpersonal speaking and assertion skills. Equally important is for the City to dedicate sufficient staff time to the functions of cable television performance monitoring.

1. **The "Existing" Model:** The most popular and perhaps most cost effective model used in California today is the assignment of a staff person who has various part-time duties that include cable television duties. As in Berkeley, many cities' Deputy City Managers, Assistants to the City Manager, or Public Information Officers have cable added on to their primary job duties. However, this methodology, as Berkeley is realizing, may not be the most productive because of the workload conflicts. This model will be referred to as the "existing" model in subsequent sections.

To staff the management-level duties identified in the previous sections, the City may wish to consider other options. For example, some California cities employ full-time Cable Television Administrators and support staffs, e.g. Los Angeles, Santa Monica, Hawthorne, El Segundo, Pasadena, West Hollywood, and Long Beach. However, these cities generally have aggressive municipal access operations that also fall under the supervision of these same individuals. In most cases, the staff in these positions spend half-time or more in the television production and public information area and half-time or less with their cable regulatory duties.

Since Berkeley is not yet active in producing its own municipal television programs at this time, a full-time Cable Administrator is not considered necessary nor recommended. However, if Berkeley expects to expand in the area of municipal programming, we would recommend that this model be considered.

2. **The "Management Analyst" Model:** Another option available would be to create a 3/4 time employee status position with modified benefits to handle cable television functions. For the purpose of discussion in subsequent sections, we'll refer to this as the "management analyst" model. In this scenario, many of the duties assigned to the City's Assistant City Manager could be reassigned to this individual as his/her primary duties. The Assistant City Manager in this model would have only administrative involvement with cable under this model.
3. **Contract Professional Services:** Another consideration growing in popularity among southern California cities is to engage professional services firms or contract employees. Under this scenario, the contract services firm would perform a variety of duties similar to those identified within this report.

The City of Santa Ana, and the City of Beverly Hills, recently replaced their full-time cable administrators with this form of staffing. Other Orange County cities i.e. San Clemente, Fullerton, Garden Grove, San Juan Capistrano, Laguna Beach, Buena Park, Costa Mesa, and the cities involved in the JCTA -- Huntington Beach, Fountain Valley, Westminster, and Stanton -- periodically employ specialized cable television consultants to assist in various aspects of cable television performance reviews.

D. Where to Put Cable Enforcement?

For a number of municipalities with cable system's the age of Berkeley's, cable television compliance duties were relegated to Public Works departments, because they had the responsibilities to supervise cable construction and the use of the public rights of way. With the advent of municipal access, some cities have assigned cable television public information or community services departments, which are often aligned in some way to the City Manager's office. In some cases (Costa Mesa, San Marcos, County of San Diego) is cable administered by Information Services departments.

No single formula exists at this time. However, an underlying benefit in any model is to optimize the cable function with those of similar operations. CSC believes that as more and more cities develop telecommunications infrastructures, cable television may find itself best aligned with a central services department such as information services or telecommunications.

E. Review of Costs

Our final analysis compares the costs of the scenarios discussed above. The chart on page 10 compares various costs associated with full-time or part-time staffing allocations, across skill areas, and employees vs. contract workers.

IV. NEXT STEPS

Increased regulatory responsibilities may fortunately coincide with increased revenues from franchise fees which could be the means of offsetting the costs of an expanded regulatory program.

<u>TYPE OF SCENARIO</u>	<u>MANAGER</u>	<u>ANALYST</u>	<u>TOTAL COST</u>
"Existing Model"			
Current Staffing in CMO and Public Works. No expanded duties.	\$10,000* based on 10% of Sean Gordon w. benefits	\$6,500 based on 10% of Jeff Baker w. benefits	\$16,500
"Mgmt. Analyst Model"			
Stepped up regula- tory scheme using 3/4-time and part- time resources along with primary manager at 10 hrs. per week for admini- strative duties. and use of part- time technical consultant.	\$20,000* based on 10 hrs/wk w. benefits	\$22,500 to \$24,336 based on 30 hrs./wk at \$10-\$12/hr w. benefits plus an addi- tional \$7000 for outside technical consultant	\$49,500
"Consultant Model"			
Limited primary administrative staffing combined with intern and half-time professional services. Intern supervised by consultant. performed by the City. Consultant to conduct all annual audits & reports mandated by franchise except those already performed by the City. Includes customer complaint resolution. Price not to exceed \$40,000.	\$2,500 based on 2 hrs/wk.	\$6,500 Intern costs at 20 hr./wk	\$48,000

* Management position at approximately \$80,000 per year

SECTION VI

COST OF COMMUNITY NEEDS RECOMMENDATIONS

INTRODUCTION:

Section 626 of the Cable Act requires each franchising authority to take into account the cost of meeting cable related community needs and interests.

In this section these costs are approached in three steps:

- I. Cost of Recommendations:** First, the approximate costs associated with the 12 recommendations from the community needs assessment and those cost related items associated with public access management described in Section V A will be presented.
- II. Financial Capabilities:** Second, the limit to the cost of community benefits that Bay Cablevision's Berkeley system can afford is estimated based on the analytic models of Deloitte and Touche.
- III. Options for Affordable Packages:** Finally, the options for "affordable" packages of community benefits are discussed.

Figures mentioned in this section are estimates only, based on the analytical models presented by the CSC financial advisor (Appendix A: Three Scenarios) and the experience of CSC members working in other jurisdictions. Actual costs are subject to a range of factors and vary widely.

I. COST OF RECOMMENDATIONS

Community benefits, for the purpose of this analysis, are those investments that do not produce system revenues.

Clear distinctions are often difficult to make. For example, can a plant rebuild be considered as a community benefit when the picture quality is variable and maintenance is high on the existing aging plant? Furthermore, the existing system lacks features of commercial importance that would be included in a modern plant, such as addressability and higher capacity. A rebuild clearly will result in positive revenue and net operating income effects.

The problem is that even though the large capital investments such as a rebuild or even I-Net construction have revenue potential, they require for payback to occur. Thus it is hard for cash flow to support investments in pure community benefits as well as large capital expenditures in plant during the first years after renewal.

For the above reason, as well as Bay Cablevision's recent system upgrade and the unclear picture of both future technology and competition, the request for a rebuild has been delayed for four years. Other community benefits will be factored in first in the following analysis.

A. Incremental costs

The following recommendations may have an incremental impact on the company's operating budgets:

1. Addressability

Addressability is a system feature desired by most operators. It has commercial value in reducing the cost of churn and in selling pay-per-view programming. The community benefit aspect of the recommendation involves ensuring that PEG producers will be allowed to utilize the addressable feature of the system when it exists. An operator expenditure in producing this benefit will be offset by added revenue streams from addressable services and reduced service calls.

2. Leased access

The provision of leased access is required by Federal law. The community benefit involves the voluntary pricing of leased channels to accommodate educational institutions and non-profit organizations. Any cost would be marginal, and, in any case, it would be voluntary.

3. PEG access on lowest priced tier

Similarly, the PEG pricing request is voluntary and would have marginal cost effects at best.

4. First Source

Unless significant extra training is involved, this would not involve franchisee expense.

5. Customer service standards

These are likely to result in both capital investments and operating expenses.

6. Transfer or sale requirements

This is an administrative requirement.

B. Direct or Fixed Costs

The following are the recommendations that involve direct or fixed costs.

1. PEG access channels

Three channels are recommended for immediate PEG use. Assuming the recent upgrade provided an additional 20 channels for a \$3 million investment, the cost per channel associated with the upgrade is \$150,000 each. Three would have cost \$450,000 to develop. This is a high estimate in that it assigns the more expensive new channels to PEG instead of a weighted average for all channels.

Assuming a 200 mile 550 MHz rebuild that produces 80 video channels will cost \$7.6 million (150 miles at \$23K/mi + 50 miles at \$83K/mi), each channel would cost \$95,000. For 6 PEG channels, the cost would be \$570,000 less \$450,000 (already credited for the first 3 channels) for a net of \$120,000 in year 4. For 9 (3 additional requested for education), the cost would be \$855,000 less \$450,000 for a net of \$405,000 in year 4.

2. PEG equipment and facilities

The recommendations break into three cost categories:

- a. Equipment packages
- b. Facility/building improvements
- c. Drops and internal wiring

a. Equipment Packages

We have identified equipment options for 5 different packages which, together, balance the need for centralized, decentralized and mobile production resources and for varying levels of production quality.

- i. Central studio, fully equipped for high quality productions
- ii. City Council Chamber/portable government production units
- iii. Build a production facility at Berkeley High School
- iv. Video conference units that include one camera, VCR, and converter which makes community centers and meeting rooms capable of originating electronic meetings (and which lend themselves to amateur operation)

- v. Van and portable studios that include cameras, lights etc. in an anvil case which turns community centers and meeting rooms into mini-production studios (and which does not require high technical capabilities to operate)

Table V-1 provides the range of costs for each package and a total for the equipment category. Typical equipment lists are provided in Appendix E.

**Table VI-1
Equipment Options**

	Low	High
Central studio	400K	600K
City government	150K	200K
BUSD	75K	100K
Video Conf Units @12K	300K (25)	480K (40)
Mobile van/studio	75K	100K
 Total	 \$1 million	 \$1.48 million

b. Building/Facility improvements

The primary building improvement costs will be associated with the central production facility, the Council Chambers in City Hall, and Berkeley High School. Table VI-2 provides estimates for these.

**Table VI-2
Building Improvements**

	Low	High
Central production	100,000	150,000
City Hall	25,000	100,000
Berkeley High School	25,000	100,000
 Total	 150,000	 350,000

c. Drops and Internal Wiring

We assume that many of the buildings identified on the map overlays presented in Section IV will require cable to the back of the television set. We estimate that 56 buildings or less will require both drops and internal wiring. These estimates are shown in Table VI-3.

Table VI-3
Drops And Internal Wiring

	\$/Bldg	Bldgs Total	
Drops	95	56	5,230
Wiring	55	56	3,080
Total			9,310

d. Network Capacity

The recommendations call for development of a 4 to 12 mile I-Net in the short run. Table VI-5 provides cost data for developing various scenarios using cable or fiber. Table VI-4 applies these data to the several I-Net scenarios.

Table VI-4
550 MHz I-Net

I. 100% Aerial and interactive

	Coax		Fiber	
	Low \$19K/Mi	High \$27K/Mi	Low 29K/Mi	High 37K/Mi
4 miles	76K	108K	116K	148K
8 miles	152K	216K	232K	296K
12 miles	228K	324K	348K	444K

II. 50% Aerial and interactive

	Coax		Fiber	
	Low 49K/Mi	High 57K/Mi	Low 59K/Mi	High 67K/Mi
4 miles	196K	228K	236K	268K
8 miles	392K	456K	472K	536K
12 miles	588K	684K	708K	804K

III. 100% Underground and interactive

	Coax		Fiber	
	Low 79K/Mi	High 87K/Mi	Low 89K/Mi	High 97K/Mi
4 miles	316K	348K	356K	388K
8 miles	632K	696K	712K	776K
12 miles	948K	1044K	1068K	1164K

In the time frame of 2 to 4 years, a complete rebuild of the system has been recommended. As stated above, a rebuild is not considered a community benefit by our definition.

TABLE VI-5
COST ESTIMATES FOR DISTRIBUTION PLANT OPTIONS
(New Construction)

COAXIAL CABLE

Aerial:

w/550 MHz Amplifiers 12 to 15 K/mile
Including "make-ready" 5 to 10 K/mile

Total 17 to 25 K/mile

Underground:

w/550 MHz Amplifiers
Existing conduit 15 K/mile
Street cut required 60 K/mile
Difficult terrain 100 K/mile

ADD 2-WAY AMPLIFIERS 2 K/mile additional

FIBER BACKBONE 10 K/mile additional

HEADEND UPGRADE:

Maximum 20 additional channels 20 K/channel
160 K max w/o new headend

Source: CSC, 1991

3. Interconnection

The recommendation proposed that one of the three immediate PEG channels be interconnected to the Richmond, El Cerrito and Hercules systems. It is possible for the PEG channel to replace existing channel 28, the Bay Cablevision Programming Network, as that channel. Interconnecting a different channel creates the problem of what it might connect to in each of the other systems.

For the purpose of considering the cost of the recommendation, we estimate \$25,000 for cabling and amplifiers and \$3,000 for head-end changes for a total of \$28,000. Assuming three PEG channels will be interconnected after the rebuild, the total interconnect cost will \$84,000.

4. Universal build

We do not have an accurate description of all unserved areas in Berkeley. We assume 3 miles of underground plant in the hills will be required at a total cost of \$351,000 (\$117K/mi x 3 mi) plus 5 miles underground in the central business district for \$385,000 (\$77K x 5) plus 5 miles aerial in West Berkeley for \$125K (\$25K x 5). This totals \$861,000 and is certainly a very high estimate.

5. Cash

A number of opportunities for demonstration projects plus the need for public access seed funding were identified in Section 4 or Section 5. Assume a level of special project and seed money grants totalling \$100,000 per year for four years.

II. FINANCIAL CAPABILITIES OF BAY CABLEVISION

Rather than develop a number of computer runs with varying community benefit packages, the financial subcontractor created two helpful forecasting programs to address the break-even analysis of any capital investment, and the fiscal impacts of these investments on Bay Cablevision's Internal Rate of Return (IRR) and Net Present Value (NPV). Affordability, according to our financial expert, is a rate of return that exceeds its cost of capital.

According to forecast assumptions presented in Mr. Smith's report (Appendix A: Report Exhibit 1 and 3), Bay Cablevision could spend \$15 million or more for community benefits and still potentially earn a rate of return exceeding its cost of capital. The model also suggests that break-even on plant extensions would occur at a ratio of 64 subscribers for every \$100,000 spent. For example, Bay Cablevision estimates that it would take \$1 million to extend cable services to the residential areas of UCB. Accordingly, his formula suggests that 640 units would be needed to subscribe in order for the investment to break even. Bay Cablevision estimates that 7,000 units are unserved by cable at UCB.

Furthermore, the conservative assumptions regarding penetration increases and rate increases were used to generate the estimate of affordability. In addition, no new revenue streams such as pay-per-view view were included. No I-Net revenue was projected.

III. COST OF COMMUNITY BENEFITS VS AFFORDABLE EXPENDITURE LEVELS

The following summarizes the maximum costs of the community benefits recommended:

A. PEG Channels	\$450,000 (Year 1) 405,000 (Year 4)
B. PEG Equipment/Facilities	
1. Equipment	\$1,480,000 (Year 1 & 2)
2. Facilities	350,000 (Year 1 & 2)
3. Drops/Wiring	9,300 (Year 1)
C. I-Net (12 miles, fiber, & underground)	\$1,164,000 (Year 1 & 2)
D. Regional Interconnect	\$28,000 (Year 2) 84,000 (Year 4)
E. Universal Build	\$861,000 (Year 1 & 2)
F. Cash	<u>\$400,000</u> (Years 1,2,3,4)
TOTAL	\$5,231,000

It is possible to include the entire rebuild estimated at \$ 7.6 million for a grand total of 12.831 million and stay well below the estimated level of affordable community benefits of \$15 million. Berkeley should get all of its needs met.

SECTION VII
STRATEGIC POLICY OPTIONS
In Context of
Changing Regulatory, Technical and Market Conditions

I. INTRODUCTION

The City of Berkeley must make a policy decision regarding the renewal of its cable television franchise in the midst of significant, ongoing technological, regulatory and market changes. The purposes of this report are to identify the changing conditions most relevant to the renewal decision, and to provide policy options to the City in the context of the changing conditions.

As background, this report first defines cable television in terms of its meaning to the Berkeley community and defines the trends most relevant to the franchise renewal. The issues raised in the first two sections are then summarized. The report ends with a discussion of the City's cable policy options.

II. BACKGROUND:

What Is Cable Television And What Does It Mean To The Berkeley Community?

Both the economics and the history of the cable television industry to date have been based on the sale of entertainment programming.

Cable television began as an extension of the broadcast television industry. Cable in the 1950s and 1960s simply relayed the signals of local broadcasters via a master antenna to homes in the community with poor over the air reception. Beginning in the middle 1970s, cable systems began to differentiate their programming from local broadcasters by carrying imported entertainment services distributed via a satellite network.

The business plans and financial pro formas in an operator's application for a cable television franchise are based primarily on revenue from the sale of entertainment programming. Investor's are attracted to the profits generated by entertainment retailing.

The City has the opportunity during the franchise renewal process to consider additional social roles for cable television (see Section IV - Cable Related Community Needs) as well as alternatives for franchising cable television as a system of entertainment retailing. This section provides background for formulating and evaluating those options.

A. Community Benefits

The non-commercial or community benefits define the social meaning of cable television to the Berkeley community.

1. Diversity:

The community benefits of commercial cable television derive from cable's relatively high channel capacity compared to broadcast television. Diversity has long been held as the promise of this large channel capacity. It is fair to say that cable has innovated programming such as networks tailored to specific audiences, regional sports, uncut and uninterrupted films, classic films, and music videos.

One of Berkeley's social goals is maintenance of its rich cultural diversity. Ideally, this diversity could be served by cable-delivered arts and entertainment. However, additional diversity is limited by the calculus of profitability. That is, channels, even when relatively abundant, will be allocated to those programming services with the largest audience and/or best demographics.

The City cannot directly influence programming service decisions of the cable franchisee. The City can encourage any modernization of the cable plant to optimize the increase in channel capacity with the cost per channel. Very narrow interests have the best chance of receiving service when the technology can deliver many relatively low cost channels.

2. Community Communications Subsidies:

The ability to subsidize non-commercial forms of community communications from the income generated by selling entertainment programming is another community benefit. The subsidy usually takes the form of plant facilities such as channel capacity, drops to buildings and interactive capabilities. Since these benefits take a physical form, they are more difficult to withdraw as regulatory and market circumstances change. Cash subsidies to public access, staff assistance and the like are easily withdrawn. Community uses of cable have been discussed in the Needs Assessment Report where minimum requirements for PEG access and I-Net facilities are justified.

The Cable Telecommunications Act of 1984 protected to a degree the tradition of PEG access and included an additional requirement for leased access. No competing industry has a similar tradition nor similar requirements in law. This is one reason for municipal officials to hope that the cable television franchisee succeeds relative to its marketplace competitors.

3. Municipal Revenues:

As another benefit, cable television produces revenue to the municipal corporation through the mechanism of the franchise fee. This fee, also sanctioned by the Cable Act, recognizes the authority over public rights of way held by city government.

The five percent franchise fee currently produces \$150,000 per year in Berkeley. Of course, a higher penetration rate, more local advertising sales, consumption of additional premium programming, higher rates or commercial success of new services such as pay-per-view could raise that figure in the future. Three percent of the current cable income, or \$90,000, is added to the City's general fund while two percent, or \$60,000 is reserved in a special undergrounding fund.

4. Infrastructure:

While the predominant social purpose, economic function and public concept of cable television is as a retailer of video entertainment services, the cable television physical plant is a broadband transmission facility that adds a unique dimension to Berkeley's infrastructure.

As infrastructure, the local cable plant is built to transport a high volume of video signals. Alternative local technologies such as terrestrial microwave have a much lower capacity and operate only on a line of sight. The telephone system is in the process of modernizing its switching electronics in order to handle near full motion video over existing copper wiring. Of course, both the cable industry and the phone companies are in process of replacing copper wire all or in part with fiber optics.

In addition to high volume video transport, cable television - whether using coaxial cable or fiber - can easily be made capable of transporting high speed data. New technologies are emerging which use the cable facility to carry even switched voice communications (see Trends section below) .

The potential community benefits of the cable system infrastructure include the price effect of competition in data and voice markets, as well as the benefits produced by local organizations and institutions using video communications. (See discussion in Needs Report.)

B. Cable Plant Modernization And Community Costs

The conventional coaxial cable plant delivering 35 to 54 channels has served its traditional role well. These plants are aging, however, and limit future options. A major aspect of the franchise renewal or any optional cable policy involves decisions about modernizing the cable plant and changing its capabilities and characteristics.

The investor, Bay Cablevision, is motivated to modernize the plant to increase its profits. The City of Berkeley is motivated to see that the plant is designed and used to acquire the benefits described above. In general, the greater the potential for commercial success, the more likely the community will receive non-commercial benefits. This tension between the need for commercial profit with the need for community service gets physically embedded in the modernization of the plant. An I-Net is an example.

Modernizing the cable plant as a vehicle for distributing imported entertainment programming and producing community benefits has a consequence or cost. The consequence is the community will pay a price spending its money and its collective attention consuming entertainment. Residential consumers will pay a portion of their income for the service. Entertainment will become an imported commodity of economic significance. Consuming video entertainment will compete as a social activity with consuming local live entertainment, acquiring education, maintaining civic responsibilities and pursuing the business of the community. The result could be what Neil Postman has referred to as "amusing ourselves to death."

There are two alternatives for obtaining community benefits of cable through commercial system ownership while also minimizing the community's time and money spent consuming entertainment. 1) Keep the cost of modernization low so as to reduce the requirements for operating revenue. 2) Add additional high value-added markets so that entertainment does not carry the entire economic burden. For example, use that I-Net to generate income for the system.

Finally, cable television may become an additional responsibility for the municipal government. This added responsibility is optional. Decision makers can choose to limit the city's role in regulation or use of the system once the franchise is negotiated and can leave all remaining issues and outcomes to the marketplace.

Accepting additional responsibility will require expenditures and possibly investments. The options include paying for effective franchise compliance activities, planning and developing municipal utilization, producing video and possible data for distribution of municipal information over cable, providing technical assistance to local institutions and community organizations for developing video utilization plans, or investing in one or more elements of the cable system.

C. Summary:

In summary, cable is an entertainment service requiring investment in technology that results in time and money costs to the community. Even in this social role, cable can bring a number of benefits to Berkeley, including:

1. potential diversity in video entertainment,
2. an opportunity to subsidize the telecommunications needs of local institutions and community organizations,
3. a small amount of revenue to the municipal government,
4. an important element of the City's infrastructure and
5. a possible new responsibility for the municipal government.

These are elements to consider when evaluating the policy options discussed at the end of this report.

III. TRENDS

The following are the key trends in cable industry-related technology, services market conditions and federal regulations.

A. Technology

Modernization of the cable plant will certainly require the addition of addressability -- making each television set electronically readable by the head-end computer. This is an essential capability for the sale of pay-per-view programming but is also important for eliminating physical access to the home to change levels of service.

The most likely innovation in addressability involves the search for "interdiction" -- placing the converter electronics outside the home in order to avoid damage and theft. Actual video switching is considered too expensive to be near term.

Cable systems are built on a trunk and branch structure that best accommodates one-way delivery of programming, much like broadcast television. That is, the system transmits the signal from the head-end (HE) to many receivers (R1, R2, R3, etc.) in the community.

Cable systems can be outfitted to carry return or upstream signals but they cannot switch signals. This means that a receiver R2 could be equipped to send signals to the headend HE, but could not exchange information with another receiver R3. Switching is the strength of the telephone system -- but the telephone network can not yet switch nor transport high volumes of video.

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Until video switching emerges, technologies that affect capacity will have a more dramatic impact. The early 1990s finds the telecommunications industry generally, and the cable industry particularly, on the edge of major technological breakthroughs in transmission capacity. However, promises of technological advances should always be treated skeptically. This is particularly true at this time since the cable industry is attempting to preserve its monopoly hold on the video marketplace by convincing federal policy makers of its technological capabilities vis a vis the telephone industry.

Nevertheless, the following reports have recently appeared in the trade press:

1. Expanded-bandwidth amplifiers capable of operating with over 100 channels should be available within 1.5 years. 150 channel capability should be available in 1992. This advancement is based on a revolution in semi-conductor design which outpaces the last 10 years of progress. Multi-Channel News, October 30, 1989
2. Times Fiber Communications will introduce its 1000 MHz coaxial cable in December, 1989 (capable of carrying 100 to 150 color video channels). This product will have better signal loss properties than current state-of-the-art 600 MHz cable and won't cost much more than 600 MHz. Multi-Channel News, November 6, 1989.
3. ATC predicts that it will build a fiber backbone and fiber trunk "cable" system capable of carrying 1,000 video channels. The proposed design would break each cable system into 300 home service areas. This would allow different neighborhoods to get different bundles of programming. Video input sources from satellite delivered fare to video discs would be used in the system. No timetable was proposed. Multi-Channel News, May 14, 1990.
4. IPITEK, Inc. is introducing a dual transmitter AM optical fiber transmission system capable of providing 1,200 MHz downstream and 100 MHz upstream. Its a 3 fiber system with 2 used for downstream transmission. Multi-Channel News, May 21, 1990.
5. John Sie of TCI has called for an all digital high definition TV format (HDTV) by the year 2000. This would compress video signals so that HDTV would fit into 6 MHz (instead of 10), normal TV would fit into 1.5 Mhz (instead of 6) and ultra-high definition TV (UDTV) into 24 MHz. HDTV gives the resolution of 35 mm film and UDTV gives the resolution of 70 mm film. Using this format, cable operators could run 300 channels on plant delivering 1000 MHz. Sie predicts that by 1995, cable operators will build fiber to 200 home serving areas for \$150 per home. Multi-Channel News, May 28, 1990.

6. General Instrument Corp. made an 11th hour HDTV proposal to the Federal Communications Commission (FCC). Experts had predicted this technology would not be available for another 10 years. Called DigiCipher, this all digital system is the first in the world proposed as a broadcast standard. Used on a standard satellite transponder, it would increase capacity from 1 channel to 5. Similarly, it would increase the capacity of a standard 35 channel cable TV system to 175 channels. Multi-Channel News, June 11, 1990.

Wireless technologies have also experienced dramatic increases in capacity. Multi-channel multi-point distribution systems (MMDS) use terrestrial microwave frequencies to deliver up to 28 channels of video programming, and they do not need a local franchise. Similarly, direct broadcast satellites (DBS) can deliver up to 15 channels of programming without any local facilities except those purchased or leased by the subscribers to receive and decode the signals. These capacities will also continue to increase.

In addition to the dramatic increases in channel availability, some form of high definition television (HDTV, UDTV, enhanced television, digital television) will be on the market by the mid 1990s. Film quality resolution, larger pictures, rectangular images (that will accommodate the shape of modern films and eliminate the need for the "pan and scan" technique used in videocasting films today) and the ability for the originator or the viewer to manipulate the image will result. HDTV will change the experience of viewing video and in itself may precipitate changes in the social role of video communications.

For example, the following was recently reported in the trade press:

The Club Theatre Network (CTN) is a new enterprise that intends to build HDTV theatres (called tele-cine) in resorts, exclusive country clubs and high rise condominium complexes. All programming will originate from CTN's facility in Pompano Beach, FLA. with the distribution network consisting of a private underground fiber network to be provided by Southern Bell. The tele-cine theatres will be built in existing rooms, will seat 50 to 75 and will be outfitted with lounge chairs equipped with microprocessors, keypads in the arms and phonesets. The software and hardware will be provided by Unisys Corp. The equipment for each room will cost \$120,000. The target audience is affluent, over 40 and predominately male or married couples. 80% of the programming will be first run movies and 20% will be corporate meetings, fashion shows, auctions or interactive television. 5,000 tele-cines are planned nationally.

B. Services

The diversity of programming content and the capability of delivering innovative "information age" services have been among the promises of cable television for the past 20 years. Although neither promise has been well realized so far, the impending competitive environment may add credibility to these claims of new services. Recent articles in the trade papers are illustrative.

1. A strategic planning exercise conducted with 25 cable TV executives produced the following predictions regarding services in the year 2001:
 - a) 20% of the industry's revenues will come from new services not now offered but which will be developed from the existing platform of entertainment services.
 - b) The new services will include customized on-demand services, data and audio services, education (meaning programs offered commercially by such as Prodigy, not the education programs of local institutions), graphics and imaging, and business services such as private networks, video and other broadband services. (Multi-Channel News, May 28, 1990.)
2. Jerrold Communications is about to launch Digital Cable Radio, a commercial free, premium cable audio service. Rates are expected to range from \$7 a month for 8 compact disc quality music channels to \$12 a month for 28 channels. Market tests indicate a 7% to 10% penetration is likely in most markets. Ultimately, DCR envisions offering 96 channels of sports, news, weather, and educational programming, including 3 channels in each of 20 foreign languages. Multi-Channel News, May 21, 1990
3. Three firms are about to launch digital radio services over cable TV systems. One firm, International Cablecasting Technologies Inc., is backed by TCI among others. Digital cable radio will feature compact disc quality transmissions of music packaged for niche audiences. Some of the services plan to replay foreign and domestic radio stations as well as digital simulcasts of soundtracks for movies being shown on other pay channels. Los Angeles Times, June 27, 1990.
4. Video Jukebox Network allows viewers to "order" music videos for \$2.50 each via a 900 number from a video jukebox installed at the cable company's headend. VJN is offered by 55 cable systems. Cable World, April 23, 1990.

5. Interactive features have been integrated into cable TV through the use of 900 call-in services. The "next wave" of interactively will be among the services tested in the fiber cable build in Cerritos. Full video on-demand will be available by the end of 1990 to a small number of homes. The residents will be able to stop, fast forward and otherwise manipulate the videos they order from the cable operator. Electronic games such as the football game QB1 (allows players to guess the next play in nationally televised NFL games) will be offered along with tele-shopping. Other interactive possibilities include commercials that signal a set-top box to print out a coupon, sporting events and concerts in which viewers can use remote controls to change camera angles or shots, and dramas in which remotes would dictate the flow of the story. Multi-Channel News, May 14, 1990.

One of the most important announcements regarding new cable based services doesn't involve entertainment programming. It suggests the possibility that the cable plant can produce revenue in telecommunications markets:

1. First Pacific Networks is looking for cable system partners to implement a new technology it developed for switched voice communication services over broadband. The system requires between 1 and 4 video channels and runs on a fiber backbone with mini-system hubs serving 4,000 homes each. The switching logic is embedded in the telephones themselves instead of in a central computer as with the telephone system. Signaling is peer to peer as in a high speed data network. Multi-Channel News, April 16, 1990.

C. Federal Regulations And Markets

Declining federal regulation in all telecommunications markets has been a trend for almost 20 years. Broadcast radio, broadcast television, communication satellites, and telephone markets have all been affected. Regulatory changes particularly in the telephone industry have been precipitated by increasing reliance on and convergence with computing technologies. Computers have traditionally been a relatively unregulated industry. As computers become the centers of network control, however, there are no "pure" network portions to identify and regulate.

Federal and state governments are gradually reducing regulation and encouraging competition. The systems used for the local transmission of information have been among the last markets to experience declining regulation. Complete deregulation will probably not occur until near perfect competition develops.

Competition is coming even to the local loop voice communication market, which has traditionally been monopolized by the regulated telephone utility. In the last few years, even this 100 year old tradition has been challenged by cellular telephone systems (a completely separate network for mobile telephone service) and alternate local access providers (so-called fiber bypass companies).

Therefore, the current shift in national cable television policy toward increased competition should not come as a surprise. Cable television is essentially a broadband local loop technology. Given the chance to re-regulate cable systems by increasing the franchising powers of cities, Congress has instead shown a preference for encouraging competition as the mechanism for curbing the pricing and customer service abuses that have been perceived in the cable industry nationwide.

The general status of current regulatory proposals is as follows:

1. Congress is considering allowing telephone companies to carry video entertainment to the home in competition with existing cable television operators (referred to as telco entry). This is not a likely outcome this year, but the conventional wisdom is that it is not whether telcos will be allowed to enter the video entertainment market but when and under what regulatory conditions.
2. The regulatory options for telco entry appear to be the cable model with minimal local authority or the "video dial tone" -- telephone company provides the transport to the home for electronic publishers, program providers and such as program utilities.
3. The commercial development of new delivery technologies such as DBS and MMDS certainly will introduce an element of competition into the video entertainment marketplace regardless of whether Congress authorizes telco entry.
4. Congress also may act to ensure equal access for competing delivery systems to the video entertainment wholesale programming networks now monopolized by the cable television industry.
5. Factions in Congress are holding out for renewed regulatory powers over the cable industry. Congress is considering re-regulating rates, customer service standards and technical standards -- at the federal level however. If enacted, the legislation would have the effect of weakening the municipal ordinances with relatively tough consumer service and technical standards and giving authority for rate regulation to the FCC.

The danger in policies reliant on declining regulation and increasing competition is the loss of the public interest, non-commercial, community benefits of cable television. The need for a level playing field will likely cause Congress to eliminate such community benefits as franchise fees and PEG access franchise requirements. As a look at housing demonstrates, minimally regulated markets tend to be harsh.

IV. STRATEGIC ISSUES FOR BERKELEY POLICY MAKERS

The following list identifies some of the near and middle term issues that could influence Berkeley's cable policy decision.

A. Regulatory Control:

The local franchising authority will probably have less regulatory control over the cable franchise in the future.

This means that significant delay in negotiating a renewal may result in less municipal leverage. The renewal provisions of the Cable Act are not currently being revised, but that could change by next year.

Should the current legislation pass there may be an immediate effect on the franchise negotiated with Bay Cablevision. For example, tough local consumer standards may be superseded by weaker FCC standards.

Requirements that are physically built into the system such as interactive capabilities, underground plant in the central business district and wiring in community centers will probably not get withdrawn. This suggests that the negotiation should emphasize immediate concrete benefits over long term vagueries about maintaining state of the art technology.

B. Cable Franchise Provisions:

Successful competing delivery systems will raise the level playing field argument and may cause Congress to further diminish existing cable franchises.

Wireless competitors do not pay franchise fees nor provide channel capacity for PEG access. To the extent that they or other competitors gain significant market share, community interest requirements over cable TV may be diminished. A presentation by Professor Roy Butz of Wayne State University at the upcoming NATOA annual conference will offer the argument that franchise fees will cease to exist within three years and that prudent franchising authorities will begin now to develop alternative sources of cable based revenue. PEG access requirements may similarly be doomed by Congressional repeal. The current proposals for telco entry into the video market do not require the telephone companies to acquire a franchise. Do not expect telephone companies to voluntarily satisfy these public interests.

C. Telco Entry:

Perhaps, more than anything else, the resolution of the role of the telephone company will clarify the future of cable television. Telephone company entry is a question of when and under what terms, not if.

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Will telcos buyout cable operators and thereby own both wires to the home? This might allow telcos to become more selective about the \$500 billion investment needed to convert the nation's telephone plant to fiber. Will they build the new facility first in high end commercial districts? ...then high density and high income residential second?

How will the conversion of formerly free TV, cable TV and the regulated telephone utility into competitive industries impact human services and low income consumers?

The FCC has proposed that telco's be permitted to compete in the video market by providing video dial tone only. This proposal avoids the level playing field argument that could lead to the elimination of non-commercial community services. Will the video dial tone provide an alternative for cable operators to avoid franchise fees and PEG access?

D. Cost Of Service:

Given the trend towards deregulation, many Berkeley residents may be priced out of the services offered over the cable system or by its competitors. Affordable access to video entertainment and to the network of community communications may become a political issue when it has become too late to do much about it.

One option is to develop a low cost life line service to households and develop the arrangements for group viewing at schools, government institutions and community centers. Failure to achieve at least one of these policies will seriously undermine the social benefits of cable television.

E. Social Costs:

There are costs of not meeting the community's cable related needs.

The needs for video communications described in a companion report are indeed needs and not mere wants. The development of organizations capable of using video for cost effective service delivery, democratic participation and resource sharing will benefit the local economy and quality of life. Failure to do so will increase the likelihood that some communities in Berkeley will be disproportionately harmed by increasing costs and decreasing service levels in health care, education, public information, public safety, recreation, and so forth.

F. System Rebuild:

There are several conflicting dynamics around the issue of modernizing the system. The City might want to get its social benefits quickly built into the system hardware because of the tenuous political and market situations. Yet, technology is rapidly changing and a more gradual modernization effort might prove more cost effective. Will Bay Cablevision want to wait for new technology? Will it merely build to match the Richmond system?

The investment in modernizing the cable plant is balanced by a franchise agreement of sufficient length to earn a return, usually a 15 year term. Given the rate of technological innovation continuing upgrades and several major modernization investments will probably occur in 15 years. Can the City do more than influence the first rebuild?

G. Technology as Political Choice:

Technology is a political choice with social outcomes, not a technical solution nor a technological imperative.

Once the social benefits from technology have been established, an appropriate business plan should be developed that will guide choices about the architecture, transmission media, features, community facilities and so forth.

The intended users need to be trained in planning how to use video communications to conduct business. Some will need skills in video production technique. Organizations need to develop in parallel with the community's technological infrastructure. The business plan for the development of individuals and organizations will be a political issue.

V. POLICY OPTIONS

The City must make its cable policy decision from a shaky platform. The basis for the City's ability to require franchise and facility arrangements that lead to social benefits is hanging precariously by the thread of yesterday's politics.

The regulatory authority of cities is declining and at least certain elements of a well negotiated franchise agreement may become unenforceable in the short term.

One approach to circumvent the policy instability is to attempt to quickly build some community benefits into the technology, but the technology is evolving so rapidly that it also might be more prudent to proceed gradually in order to maximize the benefits of investment.

The impending market competition might lower prices for video entertainment but at the cost of the loss of the social benefits, including the franchise fee.

In this world of telecommunications, newly characterized by private ownership and unregulated competition, the best way to secure the community benefits of new technology is to fundamentally control the technology.

Control can occur in only a few ways. These include:

1. Ownership
2. Long term lease
3. Some form of inviolable legal guarantee

Ownership requires capital. City capital may not be available for investment in broadband communications and, in any case, investment involves risk. Other forms of control need to be worked out with the City's team of legal advisors.

The following are the major categories of broad policy options available to Berkeley, accompanied by a brief assessment of the strengths and/or weaknesses of each.

A. Renew Franchise:

Renew the franchise on the best terms possible and hope for the best in terms of federal protection of the agreement.

This is the least risky approach in so far as the costs of proceeding are minimal and the possibility of a law suit is virtually nonexistent. Furthermore, the franchise agreement could emphasize physical facilities that, once built, might not be withdrawn. These include large capacity, two-way capability, drops to community centers, hub designs creating the capability of unique program packages for 300 home units, and so forth. There are no guarantees however, as most of the "B" cables and I-Nets promised and built during the franchise wars were abandoned and/or dismantled.

This is an excellent approach given the current Cable Act provisions. The best option is that the franchisee is willing to meet the future cable related community needs, and is willing to make an inviolable agreement to continue to meet those needs as they evolve over the next 15 years. This might involve clauses specifying periodic needs assessments, technology upgrades and the like. Or it might involve bulk lease of a substantial number of channels. Arrangements that ensure the community resources are the goal.

B. Encourage Overbuild:

Renew as in A. in order to avoid a law suit, but encourage an overbuild by another cable operator.

Overbuilds occur infrequently, usually in very small communities. Mitigating against an overbuild in Berkeley is its size, underground requirements, and the regional concentration of Bay Cablevision systems in the East Bay which provides an economy of scale that could not be matched by a stand alone Berkeley system.

C. Purchase the System:

The market value of the system is a critical factor in assessing this option. Current market rates for systems have passed the \$2000 per sub mark and the Berkeley plant is old. Overbuilds have become more popular among cable operators as the cost per sub to purchase exceeds the costs of a new build. In addition much of the value of the current system lies in the license to operate it. At a market rate of between \$2,000 and \$2,500, this would not be cost-effective. The plant is old, and the value of the franchise is primarily the license to operate. In other words, the City would be in the position of paying a market rate to purchase value which the City itself created and assigned to the franchisee. And the debate in the courts about setting fair market value when the city is the purchaser further complicates this alternative.

D. Deny Renewal:

Deny the franchise renewal if Bay Cablevision fails to satisfy some level of minimum requirements. The City could then attempt to award a new franchise without an incumbent operator, or could build a municipal system. Legal advice is required on how to dispose of or acquire the existing plant.

Franchise denial will certainly result in a law suit no matter how strong the City's case that the incumbent operator failed to satisfy the community's cable related needs or that the operator's past performance was egregiously substandard. A legal expert needs to estimate the cost of defending such a suit and determine the likely extent of any delays in conducting a franchise auction.

In any event, it is unlikely that the city has built the factual record that would permit denial under the Cable Act. And it is too early to determine the willingness of the operator to meet the future cable related community needs.

E. Encourage Wireless Competition:

Renew as in #1 and encourage a wireless entrepreneur to provide competitive entertainment programming.

It is feasible that a wireless operator could be found. This competition would probably depress the entertainment rates for a short period, but would not gain additional community benefits from the new competition. Should the wireless operator become a serious competitor the cable company would very likely seek relief from franchise requirements, especially access provisions. This is equivalent to a wireless overbuild.

F. Municipal Overbuild:

Renew as in #1, but develop a municipally owned overbuild.

With this option, the threat of a lawsuit is small, but the risk of capital is potentially high. The benefit is that Berkeley could design the system to satisfy its full range of social needs (e.g., free basic service to all households and community centers, interactive capabilities, etc.) and minimize the costs to the community. The main benefit, in other words, is that Berkeley would be in control of its own destiny.

Barriers include the lack of experience and expertise in such a development project, risk of capital, absence of well grounded experience elsewhere, and political issues surrounding government ownership of telecommunications plant.

There are a number of alternative arrangements for avoiding at least some of the barriers. For example, the City could contract with the telephone utility to build the facility, contract with a cable company to program the entertainment portion, and contract with a another firm to maintain the facility. In this scenario the City would be a designer, general contractor, user and protector of the public interest.

A public board or commission would be required along with other protections to ensure that government would not be involved in controlling the flow of information to the community.

This option should not be taken without an assessment of the total telecommunication needs of the municipal corporation, the institutions and organizations that are most important to the local and regional economy and quality of life, and of individual households, particularly those with middle and low incomes.

VI. SUMMARY

As telecommunications become a market commodity, and as the City's powers to regulate decline, Berkeley will need to make fundamental decisions about its network and the relationship of its network to all communities, neighborhoods and economic interests in the City. The cable television decision is just one aspect of this larger decision.

In the final analysis, Berkeley's decision makers need to decide what social role they want cable -- and telecommunications -- to play, and how much time, money and political risk they are willing to expend in order to fulfill their vision.

Date: November 12, 1990
To: Mr. Wally Siembab
From: Jay C. Smith
Subject: Financial Analysis of Selected Cable Television Issues for the City of Berkeley

.....

The results of our analysis of certain City of Berkeley cable television issues we were asked to analyze are reported below and in the attachments to this memorandum. These issues were selected based on requests you have made and on communication we have had directly with Sean Gordon at the City. The issues we analyzed included:

- The historical and projected financial performance of Bay Cablevision, including an assessment of the projected rate of return for the Berkeley portion of the system. This analysis was based on historical financial information supplied by the company (which we tested for reasonableness through comparisons to industry norms) and on financial projection models we constructed by applying the company's historical data to base assumptions (see the appendices to this memorandum).
- The financial effects of extending the plant to unserved areas, such as the UC campus. The analysis we provide here could be used to assess other extensions as well, including the downtown area.
- The financial impacts of other expenditures that impose costs without attendant revenues, such as public access expenditures or undergrounding cable in areas that are already served by aerial plant.
- A preliminary assessment of the feasibility of municipal or cooperative ownership, which we understand to be of interest to the City's "Cable Television Task Force."
- A brief assessment of ways to encourage competition, which we also understand to be of interest to the Task Force.
- The relationship between TCI and Bay Cablevision.

Our principal conclusions regarding these issues are as follows:

- Although the net income reported for Bay Cablevision has been negative, operating income has generally been comparable to industry norms.
- Lenfest's return on investment on the Berkeley portion of the system is likely to exceed the company's cost of capital and the company's stated expectations.
- If Lenfest were to sell the system, the company would likely realize a significant capital gain.

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- Extension of the system to serve the UC campus would potentially be financially feasible.
- The company could spend \$15 million or more for community benefits, and still potentially earn a rate of return exceeding its cost of capital.
- Although acquisition of the Berkeley portion of Bay Cablevision by the City or a cooperative could potentially be financially feasible, there would be substantial risk and there would be tension between the financial objectives and the policy objectives (for example, rate containment or significant system improvements) of the enterprise.
- Although direct competition between two cable companies would not be financially feasible in Berkeley, the City could potentially encourage competition through leased access provisions.
- TCI has a significant financial interest in Bay Cablevision.

Information related to each issue is reported below. This information was prepared solely for the purpose of supporting the City in its negotiations with Lenfest and/or Bay Cablevision, and should not be used for any other purpose. The analyses reported do not constitute an examination of prospective financial information in accordance with standards established by the American Institute of Certified Public Accountants. The analyses rely on various assumptions, and there will usually be differences between the projected and actual results because events frequently do not occur as expected.

Financial Performance of Bay Cablevision

Although the net income reported for Bay Cablevision has been negative, operating income has generally been comparable to industry norms.

- Financial statements supplied by Bay Cablevision indicate net income losses for the years 1987, 1988, and 1989.
- The reported net income is impacted by several accounting issues including:
 - . Reporting of management fees and corporate general and administrative expenses
 - . Estimated interest expenses on debt from affiliates
 - . Various depreciation treatments
 - . Estimated tax expense.

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- Operating income measures returns before the expenses noted above, and consequently is not affected by accounting treatments between the parent company and subsidiary operations for these expense items. The Bay Cablevision operating margin (operating income divided by revenue) was about 46% in 1987 and 1988, which is comparable to the industry average and in the expected range stated by Lenfest in its 1987 request for a franchise transfer.

We assessed Lenfest's potential rate of return on the Berkeley portion of the Bay Cablevision system by applying certain historical information in conjunction with a financial projection model. Cable operators typically apply an "internal rate of return" measure as a key indicator of return on investment. The internal rate of return relates annual cash in-flows to annual out-flows in a manner that incorporates the concept of the "time value of money." The net in-flow or out-flow each year is discounted at a compounded rate that equates the net discounted cash flow over the life of the investment to zero. For example, a 10% internal rate of return would mean that for a given Year 1 investment, if the Year 2 cash flow were discounted 10%, the Year 3 flow discounted by 21% (10% compounded), and so on for each year of the investment life, the sum of the discounted flows would equal zero.

We analyzed the projected internal rate of return for the Berkeley portion of the system using the following formula to measure each historical year's cash flow for the 1987-1989 period, and projected flows for each year 1990 through 2000:

$$\text{Cash flow} = \text{Revenues} - \text{operating expenses} - \text{capital expenditures}$$

We also assumed a terminal value for the system at the end of the financial projection period, estimated at eleven times the terminal year's cash flow.

A reasonable rate of return should cover the owner's cost of debt and provide a return on the owner's equity that compensates for the risk of the investment. An example appears below:

	<u>Proportion of Capital</u>		<u>Cost of Capital</u>	<u>Weighted Cost of Capital</u>
Debt	80%	x	11%	8.8%
Equity	<u>20%</u>	x	20%	<u>4.0%</u>
	100%		Weighted Cost of Capital	<u>12.8%</u>

In this example, to add financial value to the owner, an investment must have an internal rate of return that is greater than 12.8%, the owner's weighted average cost of capital.

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In its 1987 request for a franchise transfer, Lenfest stated that "Our overall financial goals for system performance over a fifteen-year time frame ... is generally a 15%-20% after-tax return on equity." Since the parent company for Bay Cablevision (Lenfest Communications, Inc.) had negative equity in 1989, any return higher than the cost of debt would reasonably compensate the owner. Lenfest's cost of debt floats with various interest rates, and we assumed a conservatively high figure of 11.5% in our analyses. *Lenfest's return on investment on the Berkeley portion of the system is likely to exceed the cost of debt and the company's stated expectations.* Certain key assumptions and results of the financial modeling are highlighted below.

- We allocated the Berkeley portion of the 1987 system purchase price based on the current proportion of Berkeley subscribers to total system subscribers currently, which leads to a higher allocated purchase price than if we used the proportion applicable in 1987.
- Assuming 48,000 households in Berkeley, the current penetration rate is only about 25% (although Bay Cablevision reportedly does not currently pass an undetermined number of the 48,000 households). We assumed two penetration growth scenarios:
 - . Scenario A, with penetration growing one percentage point a year, to approximately 36% in the year 2000.
 - . Scenario B, with penetration growing two percentage points a year, to approximately 47% in the year 2000. This rate remains below the current national average, even for urban systems (in 1989 the average basic penetration for the 100 largest cable TV systems was 53.6%).
 - . In Scenarios A and B we assumed that rates would increase at the same pace as inflation. In a third scenario (Scenario C), we assumed the same one percentage point per year penetration growth as in Scenario A, but assumed that basic rates would increase \$2 in 1992 (instead of only \$0.75 to keep up with inflation) and at the rate of inflation thereafter.
- The projected internal rates of return for the three scenarios are as follows:
 - . Scenario A - 21.56%
 - . Scenario B - 24.45%
 - . Scenario C - 22.58%

If Lenfest were to sell the system, the company would likely realize a significant capital gain.

- Allocating the reported 1987 purchase price to Berkeley based on the current subscriber proportions and applying a \$2,100 per subscriber company estimate of current value, the gain for the Berkeley portion is about \$15 million (not considering time values).

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- Considered differently, the system's "per subscriber value" is about \$1,000 per subscriber higher than when purchased (using Lenfest's value estimates), an increase of approximately \$12 million based on the current number of subscribers. This gain estimate is conservatively low because there has been subscriber growth since 1987.

Financial Effects of Extending Plant to Unserved Areas

A framework to help the City evaluate the financial effects on the operator from extending plant to unserved areas appears in the attached Exhibit 1; *extension to the UC campus would potentially be financially feasible (see Exhibit 2).*

- The ability of Bay Cablevision to break even on extensions will depend on the cost of the extension and the number of subscribers achieved in the new area, as indicated in the exhibit (based on the specified assumptions). For example, if Bay Cablevision were to spend \$100,000 (including distribution plant, converters, and drops) to extend to an unserved area, it would need 64 or more subscribers to break even on the extension.
- This framework, for example, can be used to assess possible plant extensions to the downtown area or other unserved areas of the city.
- If one assumes 7,000 unserved units on the UC campus (the company's estimate), a cost of \$1,000,000 to serve these units (the top end of the company's estimated range), and a 33.5% beginning penetration rate times 9 months (school year), then the net present value (NPV) of extending service to these campus units would be about \$1.3 million (applying the assumptions indicated in the attached Exhibit 2). If the penetration rate or revenue per subscriber were less than the system average, then the NPV would correspondingly be less.

Financial Impacts of "Generic" Expenditures

The attached Exhibit 3 indicates the financial impacts of additional "generic" expenditures that add to cost but do not generate revenue.

- For example, this table can be used to evaluate the financial effects of undergrounding cable in areas that are already served by aerial cable. For instance, if it cost the company \$500,000 to accomplish this action for a particular area, the internal rate of return (IRR) would decline about 0.35%.
- The IRR impact is reflected back to the system acquisition in 1987. The net present value (NPV) impact is from 1991 forward.

As the exhibit indicates, *the company could spend \$15 million or more for community benefits, and still potentially earn a rate of return exceeding its cost of capital (based on Scenario A assumptions).*

PLANT EXTENSION COST BREAK-EVEN ANALYSIS

- Per Subscriber Basis -
- Scenario A -

Assumptions:

Weighted Average Revenue per Basic Sub:	\$29.10/month
Variable Op. Exp./Basic sub:	\$8.50/month
Variable Op. Exp./Rev.	28.28%
Inflation Factors	DRI GNP Inflation
Residual Value	11 times additional operating income in 2000
Weighted Average Cost of Capital	11.50%

Expenditure:	Number of Additional Subs Required to Break-even
\$25,000	16
\$50,000	32
\$75,000	48
\$100,000	64
\$125,000	80
\$150,000	96
\$175,000	112
\$200,000	128
\$225,000	144
\$250,000	160

NET PRESENT VALUE OF UC BERKELEY SERVICE

- Per Subscriber Basis -

- Scenario A -

Assumptions:

Weighted average revenue per basic sub:	\$29.10
Variable op. exp./Basic sub:	\$8.50
Variable op. exp./Rev.	28.28%
Capital Cost	\$1,000,000
Additional Basic Subs	1,700
Cost of Debt:	11.50%
Residual Value	11 times additional operating income in 2000

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Inflation Factors	3.90%	4.30%	4.30%	4.60%	4.80%	4.90%	5.00%	5.00%	5.10%	5.20%
Operating Margin	\$189,236	\$196,616	\$205,071	\$213,889	\$223,727	\$234,466	\$245,955	\$258,253	\$271,166	\$284,995
Capital Costs	\$1,000,000									
Net	(\$810,764)	\$196,616	\$205,071	\$213,889	\$223,727	\$234,466	\$245,955	\$258,253	\$271,166	\$3,134,946
NPV	\$1,349,433									

FINANCIAL IMPACTS OF "GENERIC" EXPENDITURES

(\$000s)

Scenario A) 1% Growth in Penetration Rate

Additional Capital Requirements					Resultant		Impact to Base	
1991	1992	1993	1994	1995	IRR	NPV	IRR	NPV
\$100					21.49%	\$26,741	-0.07%	(\$90)
\$200					21.42%	\$26,651	-0.14%	(\$179)
\$300					21.35%	\$26,561	-0.21%	(\$269)
\$400					21.28%	\$26,472	-0.28%	(\$359)
\$500					21.21%	\$26,382	-0.35%	(\$448)
\$750					21.03%	\$26,158	-0.53%	(\$673)
\$1,000					20.86%	\$25,934	-0.70%	(\$897)
\$1,500					20.51%	\$25,485	-1.39%	(\$1,794)
\$2,000					20.17%	\$25,037	-6.25%	(\$8,969)
\$10,000					15.31%	\$17,862	-1.08%	(\$1,535)
\$500	\$500	\$500	\$500		20.48%	\$25,296	-1.08%	(\$1,535)
\$1,000	\$1,000	\$1,000	\$1,000		19.42%	\$23,761	-2.14%	(\$3,070)
\$5,000	\$5,000	\$5,000			13.61%	\$14,717	-7.95%	(\$12,113)

Base Case: 21.56% \$26,830

Assumes a 11.5% cost of debt (and discount rate) and a residual value of 11 times operating income in 2000

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Municipal or Cooperative Ownership

*Although acquisition of the Berkeley portion of Bay Cablevision by the City or a cooperative could potentially be financially feasible, there would be substantial risk and there would be tension between the financial objectives and the policy objectives (for example, rate containment or significant system improvements) of the enterprise.**

- City Ordinance No. 4918, Section 4, provides that "Upon the expiration of the term of this franchise, the City of Berkeley shall have the right to acquire at its fair market value the community antenna television system installed pursuant to this franchise."
- Bay Cablevision has estimated the current fair market value of the Berkeley portion of its system at \$20 to \$30 million. Applying a rough rule of thumb of \$2,400 per subscriber (based on an average for California system sales reported in 1989), the value of the Berkeley portion of the system would be about \$28.8 million. Using a \$2,000 per subscriber value, the Berkeley value is about \$24 million.
- Assuming a \$24 million purchase price and 30 year bond financing at 8%, and one percentage point per year penetration growth (Scenario A), the municipal or cooperative purchaser could repay the bonds; however:
 - Bridge financing or deferred payments would be required until cash flow was sufficient (by the year 2000) to cover debt service (Exhibit 4).
 - Significant rate reductions would threaten the financial feasibility of the operation (Scenario A starts with current rates, which increase with inflation).
 - Large capital expenditures for a system rebuild or other community benefits would threaten the financial feasibility. For instance, if a \$15 million expenditure (spread evenly between 1991 and 1993) is assumed, the ability to retire the bonds within 30 years would be marginal.
- The financial feasibility would be very sensitive to the financing terms. For example, an increase in the interest rate to 10% would make it impossible to retire the bonds within 30 years.

.....

- * The results reported here should be considered preliminary only, and in no way should they be used to reach any final decisions regarding municipal or cooperative ownership.

MUNICIPAL BUYOUT ANALYSIS

Scenario A) 1% Annual Growth In Penetration Rate

1 Purchase Price:	\$24,000,000																	
2 Interest Rate:	8.00%																	
3 Term	30	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
4 Additional Community Improvements	\$0	\$0	\$0	\$0	\$0													
5 Net Flow:	\$1,063	\$1,656	\$1,815	\$2,048	\$2,224	\$2,409	\$2,620	\$2,846	\$3,125	\$3,353	\$3,674	\$3,828	\$3,988	\$4,155	\$4,322	\$4,503	\$4,687	
6 Debt Payment:	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132
7 Net flow after debt payment:	(\$1,069)	(\$476)	(\$317)	(\$84)	\$92	\$277	\$468	\$714	\$993	\$1,221	\$1,542	\$1,698	\$1,858	\$2,023	\$2,190	\$2,371	\$2,555	
8 Breakeven cash point*:	(\$1,069)	(\$1,630)	(\$2,078)	(\$2,328)	(\$2,422)	(\$2,338)	(\$2,037)	(\$1,488)	(\$812)	\$581	\$2,147	\$4,015	\$6,183	\$8,711	\$11,588	\$14,897	\$18,644	
		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
4 Additional Community Improvements	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5 Net Flow:	\$4,883	\$5,092	\$5,310	\$5,537	\$5,774	\$6,021	\$6,279	\$6,548	\$6,828	\$7,120	\$7,425	\$7,743	\$8,074	\$8,420	\$8,780	\$9,156	\$9,548	
6 Debt Payment:	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132
7 Net flow after debt payment:	\$2,751	\$2,960	\$3,178	\$3,405	\$3,642	\$3,890	\$4,147	\$4,418	\$4,696	\$4,988	\$5,293	\$5,611	\$5,942	\$6,280	\$6,648	\$7,036	\$7,444	
8 Breakeven cash point*:	\$22,887	\$27,678	\$33,071	\$39,122	\$45,894	\$53,455	\$61,878	\$71,244	\$81,640	\$93,160	\$105,908	\$119,990	\$135,531	\$154,794	\$175,957	\$199,190	\$224,673	
		2025	2026	2027	2028	2029	2030											
4 Additional Community Improvements	\$0	\$0	\$0	\$0	\$0	\$0	\$0											
5 Net Flow:	\$9,957	\$10,383	\$10,827	\$11,291	\$11,774	\$12,278												
6 Debt Payment:	\$0	\$0	\$0	\$0	\$0	\$0												
7 Net flow after debt payment:	\$9,957	\$10,383	\$10,827	\$11,291	\$11,774	\$12,278												
8 Breakeven cash point*:	\$252,804	\$283,195	\$318,678	\$353,303	\$393,341	\$437,088												
NPV (through 2010) of line 7	\$7,085																	
NPV (through 2020) of line 7	\$13,488																	
NPV (through 2030) of line 7	\$20,119																	

Exhibit

* note: The breakeven cash point assumes a cost on outstanding balance at the assumed interest rate

MUNICIPAL BUYOUT ANALYSIS

Scenario A) 1% Annual Growth in Penetration Rate

1 Purchase Price:	\$24,000,000																	
2 Interest Rate:	8.00%																	
3 Term	30	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
4 Additional Community Improvements		\$5,000	\$5,000	\$5,000	0													
5 Net Flow:		(\$3,837)	(\$3,344)	(\$3,185)	\$2,048	\$2,224	\$2,408	\$2,620	\$2,848	\$3,125	\$3,353	\$3,674	\$3,828	\$3,988	\$4,155	\$4,322	\$4,503	\$4,687
6 Debt Payment:		\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132
7 Net flow after debt payment:		(\$6,069)	(\$5,478)	(\$5,317)	(\$884)	\$92	\$277	\$488	\$714	\$993	\$1,221	\$1,542	\$1,696	\$1,856	\$2,023	\$2,190	\$2,371	\$2,555
8 Breakeven cash point*:		(\$6,069)	(\$12,030)	(\$18,310)	(\$19,858)	(\$21,355)	(\$22,788)	(\$24,121)	(\$25,338)	(\$26,370)	(\$27,258)	(\$27,897)	(\$28,432)	(\$28,851)	(\$29,136)	(\$29,277)	(\$29,247)	(\$29,032)
		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
4 Additional Community Improvements		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5 Net Flow:		\$4,883	\$5,082	\$5,310	\$5,537	\$5,774	\$6,021	\$6,279	\$6,548	\$6,828	\$7,120	\$7,425	\$7,743	\$8,074	\$8,420	\$8,780	\$9,158	\$9,548
6 Debt Payment:		\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132	\$2,132
7 Net flow after debt payment:		\$2,751	\$2,950	\$3,178	\$3,405	\$3,642	\$3,890	\$4,147	\$4,416	\$4,696	\$4,988	\$5,293	\$5,611	\$5,942	\$6,288	\$6,648	\$7,026	\$7,416
8 Breakeven cash point*:		(\$28,804)	(\$27,832)	(\$26,988)	(\$25,742)	(\$24,159)	(\$22,202)	(\$19,831)	(\$17,001)	(\$13,685)	(\$9,770)	(\$5,258)	(\$68)	\$5,889	\$14,758	\$24,719	\$35,853	\$48,269
		2025	2026	2027	2028	2029	2030											
4 Additional Community Improvements		\$0	\$0	\$0	\$0	\$0	\$0											
5 Net Flow:		\$9,957	\$10,383	\$10,827	\$11,291	\$11,774	\$12,278											
6 Debt Payment:		\$0	\$0	\$0	\$0	\$0	\$0											
7 Net flow after debt payment:		\$9,957	\$10,383	\$10,827	\$11,291	\$11,774	\$12,278											
8 Breakeven cash point*:		\$82,088	\$77,478	\$64,480	\$113,307	\$134,146	\$157,155											
NPV (through 2010) of line 7		(\$5,790)																
NPV (through 2020) of line 7		\$583																
NPV (through 2030) of line 7		\$7,234																

Exhibit

* note: The breakeven cash point assumes a cost on outstanding balance at the assumed interest rate

MUNICIPAL BUYOUT ANALYSIS

Scenario A) 1% Annual Growth in Penetration Rate

1 Purchase Price: \$34,000,000
2 Interest Rate: 10.00%

3 Term	\$0	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
4 Additional Community Improvements	\$5,000	\$5,000	\$5,000	\$5,000	0													
5 Net Flow:	(\$3,937)	(\$3,344)	(\$3,185)	\$2,048	\$2,224	\$2,409	\$2,620	\$2,846	\$3,125	\$3,353	\$3,674	\$3,828	\$3,988	\$4,155	\$4,322	\$4,503	\$4,687	\$4,867
6 Debt Payment:	\$2,548	\$2,548	\$2,548	\$2,548	\$2,548	\$2,548	\$2,548	\$2,548	\$2,548	\$2,548	\$2,548	\$2,548	\$2,548	\$2,548	\$2,548	\$2,548	\$2,548	\$2,548
7 Net flow after debt payment:	(\$6,483)	(\$5,890)	(\$5,731)	(\$4,968)	(\$3,222)	(\$1,137)	\$74	\$300	\$579	\$807	\$1,128	\$1,282	\$1,442	\$1,609	\$1,778	\$1,957	\$2,141	\$2,321
8 Breakeven cash point*:	(\$6,483)	(\$13,021)	(\$20,064)	(\$22,557)	(\$25,135)	(\$27,785)	(\$30,490)	(\$33,239)	(\$35,964)	(\$38,775)	(\$41,524)	(\$44,395)	(\$47,392)	(\$50,522)	(\$53,798)	(\$57,221)	(\$60,802)	(\$64,441)

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
4 Additional Community Improvements	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5 Net Flow:	\$4,883	\$5,082	\$5,310	\$5,537	\$5,774	\$6,021	\$6,279	\$6,548	\$6,828	\$7,120	\$7,425	\$7,743	\$8,074	\$8,420	\$8,780	\$9,156	\$9,548
6 Debt Payment:	\$2,548	\$2,548	\$2,548	\$2,548	\$2,548	\$2,548	\$2,548	\$2,548	\$2,548	\$2,548	\$2,548	\$2,548	\$2,548	\$2,548	\$2,548	\$2,548	\$2,548
7 Net flow after debt payment:	\$2,337	\$2,548	\$2,764	\$2,991	\$3,228	\$3,475	\$3,733	\$4,002	\$4,282	\$4,574	\$4,879	\$5,197	\$5,528	\$5,872	\$6,230	\$6,602	\$6,996
8 Breakeven cash point*:	(\$64,545)	(\$68,463)	(\$72,535)	(\$76,797)	(\$81,248)	(\$85,897)	(\$90,754)	(\$95,827)	(\$101,128)	(\$106,668)	(\$112,454)	(\$118,502)	(\$124,824)	(\$128,886)	(\$132,905)	(\$137,138)	(\$141,304)

	2025	2026	2027	2028	2029	2030
4 Additional Community Improvements	\$0	\$0	\$0	\$0	\$0	\$0
5 Net Flow:	\$9,957	\$10,363	\$10,827	\$11,291	\$11,774	\$12,278
6 Debt Payment:	\$0	\$0	\$0	\$0	\$0	\$0
7 Net flow after debt payment:	\$9,957	\$10,363	\$10,827	\$11,291	\$11,774	\$12,278
8 Breakeven cash point*:	(\$145,477)	(\$149,842)	(\$153,779)	(\$157,867)	(\$161,879)	(\$165,789)

NPV (through 2010) of line 7 (\$10,785)
NPV (through 2020) of line 7 (\$7,153)
NPV (through 2030) of line 7 (\$3,963)

* note: The breakeven cash point assumes a cost on outstanding balance at the assumed interest rate

To: Mr. Wally Siembab
From: Jay C. Smith
Subject: Financial Analysis of Selected Cable Television Issues for the City of Berkeley
Date: November 12, 1990
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- Certain additional expenditures (not reflected in the financial projection analysis reported above) would potentially be required if the Berkeley portion were to be broken off from the rest of Bay Cablevision, making it less attractive for the City or a cooperative to purchase the system; for example:
 - . A new headend would be required, or else the Berkeley system would need to purchase signal from Bay Cablevision or another area system.
 - . Certain fixed operating expenses, which are now shared proportionately with adjoining Bay Cablevision service areas, would increase. For instance, the Berkeley system would presumably incur the full cost of a general manager, rather than only a portion of the general manager cost for the larger system.

Ways to Encourage Competition

Although direct competition between two cable companies would not be financially feasible in Berkeley, the City could potentially encourage competition for some services through leased access provisions.

- If two operators split the Berkeley penetration between them (even assuming substantial subscriber growth), at least one, and potentially both, would not earn a rate of return sufficient to justify the investment.
- If leased access channels are available to commercial programming providers at prices which do not create prohibitive barriers, the benefits of competitive pricing for at least some services could potentially be achieved, by making the market for these services "contestable" (assuming an alternative provider could offer some of the same programming choices -- for example HBO -- as the system operator). However, the legal framework for leased access and competitor's access to programming is complex. The City may wish to consult further with its attorney on this issue.

Relationship Between TCI and Bay Cablevision

Lenfest has supplied the following information in response to data requests, indicating that TCI has a significant financial interest in Bay Cablevision.:

- Lenfest Communications, Inc. is owned by the Lenfest family (52%) and TCI (48%).
- Lenfest has 20 votes per share and TCI has one vote per share.
- Lenncomm, Inc. is a totally owned subsidiary of Lenfest Communications, Inc. and the same ownership applies.

To: Mr. Wally Siembab
From: Jay C. Smith
Subject: Financial Analysis of Selected Cable Television Issues for the City of Berkeley
Date: November 12, 1990
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- Lenncomm operates the Bay Cablevision system serving Berkeley.
- If the Lenfest Group were to put Bay Cablevision up for sale, TCI has the first right of refusal.
- If TCI purchases the Lenfest share, the purchase price is to be based on a fair market value appraisal.

SCENARIO A - FINANCIAL PROJECTIONS

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: A) 1% Annual Growth in Penetration Rate

ASSUMPTIONS & CALCULATIONS

BERKLEY SYSTEM:

o 1990 BASIC SUBSCRIBERS:	12,062	
o 1990 PREMIUM SUBSCRIBERS:	9,823	
o 1990 WIEGHTED AVERAGE BASIC SUBSCRIBER RATE: (((\$15.95*10,759)+(\$29.95*13)+(\$12.75*1290))/(10,759+13+1,290) =		\$15.62
o 1990 WIEGHTED AVERAGE PAY SERVICES RATE: (((\$10.95*(4,651+2,852))+(\$9.95*896)+(\$7.95*858)+(\$10*500))/(4,651+2852+896+858+500) =		\$10.54
o TOTAL HOMES PASSED:*	48,000	
o NUMBER OF SUBSCRIBERS WITH ADDITIONAL OUTLETS:	3,188	
o TOTAL PLANT MILES:	178	
o ADDITIONAL CONVERTER CHARGE:	\$64	
o ADDITIONAL DROP CHARGE:	\$60	

* TOTAL HOMES PASSED NUMBER IS BASED UPON CITY POPULATION, AND DIFFERS FROM VALUES SUBMITTED BY THE CITY.

TOTAL BAY CABLEVISION SYSTEM:

o 1990 BASIC SUBSCRIBERS:	39,496	
o INITIAL INSTALLATION CHARGE:	\$30	
o SUBSEQUENT INSTALLATION/VISITATION CHARG	\$25	
o INSTALLATION CHARGE FOR ADDITIONAL OUTLE	\$8	
o MONTHLY CHARGE FOR ADDITIONAL OUTLETS:	\$4	
o TOTAL PLANT MILES:	548	
LENFEST'S COST OF DEBT:	11.50%	

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: A) 1% Annual Growth in Penetration Rate

ALLOCATION OF 1989 SYSTEM REVENUE TO BERKELEY:

	<u>SYSTEM VALUE</u>	<u>ALLOCATION BASIS TO BERKELEY</u>
- BASIC	\$6,627,082	
- PREMIUM:		
— HBO	\$2,006,543	
— SHOWTIME	\$1,000,716	
— CINEMAX	\$373,972	
— DISNEY	\$240,350	
— MOVIE CHANNEL	\$0	
— GIANT VISION	\$17,376	
SUB-TOTAL	\$3,640,955	
- PAY PER VIEW	\$24,773	\$0.63 PER SUB
- INSTALLATION	\$423,426	
- CONVERTER RENTAL	\$321,949	
- ADVERTISING	\$66,649	\$2.19 PER SUB
- OTHER:		
— LATE CHARGES	\$1,268	
— RENTAL INCOME	\$14,620	
— OTHER	\$11,085	
SUB-TOTAL	\$27,473	\$0.70 PER SUB
TOTAL REVENUE	\$11,153,207	

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: A) 1% Annual Growth in Penetration Rate

ALLOCATION OF 1989 SYSTEM EXPENSES TO BERKELEY:

	<u>SYSTEM AMOUNT</u>	<u>ALLOCATION BASIS TO BERKELEY</u>
A) FIXED:		
- SERVICE	\$100,000	\$3
- LOCAL ORIGINATION	\$87,219	\$2
- GEN & ADMIN	\$200,000	\$5
SUB-TOTAL	\$387,219	\$10 PER BASIC SUBSCRIBER
B) PER PLANT MILE:		
- SERVICE	\$610,032	\$1,113 PER PLANT MILE
C) PER BASIC SUBSCRIBER:		
- SELLING & MARKETING	\$1,124,182	\$28
- SATELLITE PROGRAMMING	\$499,987	\$13
- MICROWAVE SERVICE	\$1,342	\$0
- OTHER ADMIN.	\$16,008	\$0
- GEN & ADMIN	\$1,884,150	\$48
SUB-TOTAL	\$3,525,607	\$89 PER BASIC SUBSCRIBER
D) PER BASIC REVENUE:		
- COPYRIGHT FEES	\$76,696	1.2% PER BASIC REVENUE DOLLAR
E) PER TOTAL REVENUES:		
- FRANCHISE FEES	\$514,235	4.6%
- CORP. G&A	\$282,193	2.5%
- BAD DEBT COLLECTION	\$750,655	6.7% (note: bad debt expense lowered to 2.5% of revenues for 1990 and on)
- MGT FEES	\$778,580	7.0%
SUB-TOTAL	\$2,325,663	20.9% PER TOTAL REVENUE DOLLAR
F) PER PREMIUM REVENUE:		
- HBO SERVICE EXP (SE)	\$663,437	18.2%
- SHOWTIME SE	\$336,072	9.2%
- CINEMAX SE	\$99,805	2.7%
- DISNEY SE	\$99,612	2.7%
- MOVIE CHANNEL SE	\$0	0.0%
- GIANT VISION SE	\$8,613	0.2%
- BRAVO SE	\$59,348	1.6%
- NOSTAGIA SE	\$4,276	0.1%
- AMC SE	\$32,085	0.9%
SUB-TOTAL	\$1,303,249	35.8% PER PREMIUM REVENUE DOLLAR
G) PER PAY PER VIEW REVENUE:		
	\$14,817	59.8% PER PAY PER VIEW DOLLAR

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: A) 1% Annual Growth in Penetration Rate

NET FLOW (\$000):

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Revenues	\$3,692	\$3,959	\$4,404	\$4,827	\$5,213	\$5,638	\$6,103	\$6,606	\$7,150	\$7,732	\$8,362	\$9,044
Operating Expense	<u>2,333</u>	<u>2,306</u>	<u>2,489</u>	<u>2,676</u>	<u>2,876</u>	<u>3,096</u>	<u>3,337</u>	<u>3,596</u>	<u>3,880</u>	<u>4,180</u>	<u>4,506</u>	<u>4,858</u>
Operating Income	1,359	1,653	1,916	2,151	2,337	2,542	2,766	3,008	3,270	3,551	3,856	4,186
Capital Expenditures	<u>2,596</u>	<u>563</u>	<u>913</u>	<u>495</u>	<u>522</u>	<u>493</u>	<u>542</u>	<u>599</u>	<u>650</u>	<u>705</u>	<u>730</u>	<u>832</u>
Net Flow	(1,237)	1,091	1,003	1,656	1,815	2,048	2,224	2,409	2,620	2,846	3,125	3,353

ESTIMATED BERKELEY PORTION OF TOTAL 198.0 DAY CABLEVISION SYSTEM'S BALANCE SHEET

	SYSTEM GROSS	SYSTEM DEPRECIATION	SYSTEM NET	BERKLEY GROSS	BERKLEY DEPRECIATION	BERKLEY NET	% OF TOTAL	ALLOCATION BASIS
<u>LONG TERM ASSETS</u>								
LAND & BUILDINGS	\$644,323	\$909	\$643,414	\$209,287	\$295	\$208,992	32.5%	PER PLANT MILE
DROPS	\$3,732	\$0	\$3,732	\$1,140	\$0	\$1,140	30.5%	PER BASIC SUB.
OFFICE EQUIP & FIXTURES/CONFI	\$178,760	\$75,574	\$103,206	\$54,500	\$23,080	\$31,519	30.5%	PER BASIC SUB.
HEADEND	\$1,457,549	\$594,517	\$863,032	\$445,133	\$181,584	\$263,568	30.5%	PER BASIC SUB.
VECHILES & EQUIPMENT	\$1,221,742	\$644,718	\$577,024	\$373,118	\$196,896	\$176,222	30.5%	PER BASIC SUB.
CONVERTERS	\$816,467	\$547,159	\$269,308	\$249,347	\$167,101	\$82,246	30.5%	PER BASIC SUB.
DISTRIBUTION	\$30,448,589	\$7,353,585	\$23,095,004	\$9,800,235	\$2,388,573	\$7,501,662	32.5%	PER PLANT MILE
Sub-Total:	\$34,771,182	\$9,216,462	\$25,554,720	\$11,222,850	\$2,957,510	\$8,265,340		
DEFERRED ASSETS	\$5,249,875	\$0	\$5,249,875	\$1,003,301	\$0	\$1,003,301	30.5%	PER BASIC SUB.
Sub-Total:	\$40,021,057	\$9,216,462	\$30,804,595	\$12,826,150	\$2,957,510	\$9,868,650		
<u>CURRENT ASSETS</u>								
CASH	\$29,517	\$0	\$29,517	\$9,014	\$0	\$9,014	30.5%	PER SUB
ACCOUNTS RECIEVABLE	\$456,326	\$0	\$456,326	\$139,361	\$0	\$139,361	30.5%	PER SUB
ALLOWANCE FOR BAD DEBTS	(\$146,000)	\$0	(\$146,000)	(\$44,588)	\$0	(\$44,588)	30.5%	PER SUB
OTHER	\$946,714	\$0	\$946,714	\$289,125	\$0	\$289,125	30.5%	PER SUB
Sub-Total:	\$1,286,557	\$0	\$1,286,557	\$392,912	\$0	\$392,912		
Total Assets:	\$41,307,614	\$9,216,462	\$32,091,152	\$13,219,072	\$2,957,510	\$10,261,562		
<u>LIABILITIES & EQUITY</u>								
CURRENT LIABILITIES	\$1,418,860	NA	\$1,418,860	\$453,609	NA	\$453,609	32.0%	PER BERKELEY ASSETS/
ADVANCES FROM AFFILIATES	\$43,014,975	NA	\$43,014,975	\$13,754,597	NA	\$13,754,597	32.0%	SYSTEM ASSETS RATIO
RETAINED EARNINGS	(\$12,342,685)	NA	(\$12,342,685)	(\$3,946,734)	NA	(\$3,946,734)	32.0%	
Total Liabilities and Equity:			\$32,091,149		NA	\$10,261,561		

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: A) 1% Annual Growth in Penetration Rate
11-Nov-90

DEPRECIATION SCHEDULES

Item	Added Cost	Depreciation Expense Allocation														
		1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Headend 15 yr SL	Previous	302	20	20	20	20	20	20	20	20	20	20	20	20		
	Previous	15	1	1	1	1	1	1	1	1	1	1	1	1		
	Previous	14	1	1	1	1	1	1	1	1	1	1	1	1	1	
	Previous	16	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Proforma Adj.	96	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	Subtotal	445														
	1990	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1991	20		1	1	1	1	1	1	1	1	1	1	1	1	1
	1992	22				1	1	1	1	1	1	1	1	1	1	1
	1993	25					2	2	2	2	2	2	2	2	2	2
	1994	27						2	2	2	2	2	2	2	2	2
	1995	30							2	2	2	2	2	2	2	2
	1996	32								2	2	2	2	2	2	2
	1997	35									2	2	2	2	2	2
	1998	39										3	3	3	3	3
	1999	40											3	3	3	3
	2000	46												3	3	3
	2001	50													3	3
	2002	55														4
	2003	59														
	2004	64														
	2005	70														
	2006	75														
	2007	82														
	2008	88														
	2009	95														
	2010	98														
	Gross	445	452	473	495	520	547	576	609	644	683	723	769	819	873	933
	Acc Dep.	182	212	243	276	311	347	386	426	469	515	563	614	669	706	746
	Net	264	240	229	219	209	199	190	182	175	168	160	155	150	168	187
	Dep. Exp.		30	32	33	35	36	38	41	43	46	48	51	55	37	40

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: A) 1% Annual Growth in Penetration Rate
11-Nov-90

DEPRECIATION SCHEDULES

DEPRECIATION SCHEDULE																
		Depreciation Expense Allocation														
Item	Added Cost	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
		Previous	3,635	242	242	242	242	242	242	242	242	242	242	242	242	
Distribution 15 yr SL	Previous	196		13	13	13	13	13	13	13	13	13	13	13	30	
	Previous	444		30	30	30	30	30	30	30	30	30	30	30	31	31
	Previous	467		31	31	31	31	31	31	31	31	31	31	31	31	31
	Proforma Adj.	5,148		343	343	343	343	343	343	343	343	343	343	343	343	343
	Subtotal	9,890														
	1990	380		25	25	25	25	25	25	25	25	25	25	25	25	25
	1991	556			37	37	37	37	37	37	37	37	37	37	37	37
	1992	178				12	12	12	12	12	12	12	12	12	12	12
	1993	195					13	13	13	13	13	13	13	13	13	13
	1994	150						10	10	10	10	10	10	10	10	10
1995	166							11	11	11	11	11	11	11	11	
1996	185								12	12	12	12	12	12	12	
1997	205									14	14	14	14	14	14	
1998	227										15	15	15	15	15	
1999	239											16	16	16	16	
2000	278												19	19	19	
2001	306													20	20	
2002	337														22	
2003	369															
2004	404															
2005	441															
2006	481															
2007	524															
2008	571															
2009	621															
2010	642															
	Gross	9,890	10,270	10,826	11,004	11,198	11,348	11,513	11,698	11,903	12,131	12,370	12,648	12,954	13,290	13,660
	Acc Dep.	2,389	3,073	3,794	4,528	5,274	6,030	6,797	7,577	8,370	9,178	10,003	10,845	11,709	12,339	12,965
	Net	7,501	7,197	7,032	6,476	5,924	5,318	4,716	4,121	3,533	2,952	2,367	1,802	1,245	651	695
	Dep. Exp.		684	721	733	746	758	767	780	793	806	824	843	863	831	826

note: Incorporates additional costs function for added aerial and underground miles

BERKELEY CAL SYSTEM FINANCIAL PROJECTION MODEL

Scenario: A) 1% Annual Growth in Penetration Rate

11-Nov-90

DEPRECIATION SCHEDULES

Item	Added Cost	Depreciation Expense Allocation														
		1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Drops	Previous 1354		90	90	90	90	90	90	90	90	90	90	90	90		
15 yr SL	Previous 17		1	1	1	1	1	1	1	1	1	1	1	1		
	Previous 38		3	3	3	3	3	3	3	3	3	3	3	3		
	Previous 42		3	3	3	3	3	3	3	3	3	3	3	3		
	Profoma Adj. (1,450)		-97	-97	-97	-97	-97	-97	-97	-97	-97	-97	-97	-97		
	Subtotal 1															
	1990 0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1991 86			6	6	6	6	6	6	6	6	6	6	6	6	6
	1992 59				4	4	4	4	4	4	4	4	4	4	4	4
	1993 54					4	4	4	4	4	4	4	4	4	4	4
	1994 51						3	3	3	3	3	3	3	3	3	3
	1995 55							4	4	4	4	4	4	4	4	4
	1996 59								4	4	4	4	4	4	4	4
	1997 63									4	4	4	4	4	4	4
	1998 68										5	5	5	5	5	5
	1999 70											5	5	5	5	5
	2000 79												5	5	5	5
	2001 35													2	2	2
	2002 38														3	3
	2003 42															3
	2004 46															
	2005 51															
	2006 55															
	2007 61															
	2008 66															
	2009 72															
	2010 75															
	Gross	1	1	87	145	200	251	306	365	429	497	566	645	680	718	760
	Acc Dep.	0	0	6	18	29	46	66	91	119	152	190	233	278	326	377
	Net	1	1	81	131	171	206	240	275	310	345	376	412	401	392	383
	Dep. Exp.		0	6	10	13	17	20	24	29	33	38	43	45	46	51

note: Incorporates additional drop costs function for added subscribers

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: A) 1% Annual Growth in Penetration Rate
11-Nov-90

DEPRECIATION SCHEDULES

Item		Added	Depreciation Expense Allocation														
		Cost	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Fixtures, Furniture, & Office Equip 15 yr SL	Previous	0		0	0	0	0	0	0	0	0	0	0	0			
	Previous	10		1	1	1	1	1	1	1	1	1	1	1	1		
	Previous	11		1	1	1	1	1	1	1	1	1	1	1	1	1	
	Previous	12		1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Profoma Adj.	22		1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Subtotal	55															
	1990	82		5	5	5	5	5	5	5	5	5	5	5	5	5	5
	1991	15			1	1	1	1	1	1	1	1	1	1	1	1	1
	1992	17				1	1	1	1	1	1	1	1	1	1	1	1
	1993	19					0	0	0	0	0	0	0	0	0	0	0
	1994	21						1	1	1	1	1	1	1	1	1	1
	1995	23							2	2	2	2	2	2	2	2	2
	1996	26								2	2	2	2	2	2	2	2
	1997	28									2	2	2	2	2	2	2
	1998	31										2	2	2	2	2	2
	1999	33											2	2	2	2	2
	2000	38												3	3	3	3
	2001	42													3	3	3
	2002	46														3	3
	2003	50															3
	2004	54															
	2005	59															
	2006	64															
	2007	70															
	2008	76															
	2009	82															
	2010	85															
	Gross		55	137	152	169	187	208	231	257	285	316	349	387	428	474	524
	Acc Dep.		23	32	42	54	65	78	93	109	128	148	170	195	223	253	286
	Net		32	104	109	115	122	130	138	148	158	169	179	192	205	221	238
	Dep. Exp.			9	10	11	12	13	15	16	18	20	22	25	28	30	33

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: A) 1% Annual Growth in Penetration Rate
11-Nov-00

DEPRECIATION SCHEDULES

Item		Added	Depreciation Expense Allocation														
		Cost	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Contingencies	Previous	0		0	0	0	0	0	0	0	0	0	0	0			
15 yr SL	Previous	0		0	0	0	0	0	0	0	0	0	0	0			
	Previous	0		0	0	0	0	0	0	0	0	0	0	0	0	0	
	Previous	0		0	0	0	0	0	0	0	0	0	0	0		0	
	Previous	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Subtotal	0															
	1990	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1991	67			4	4	4	4	4	4	4	4	4	4	4	4	4
	1992	73				5	5	5	5	5	5	5	5	5	5	5	5
	1993	80					0	0	0	0	0	0	0	0	0	0	0
	1994	87						6	6	6	6	6	6	6	6	6	6
	1995	96							6	6	6	6	6	6	6	6	6
	1996	106								7	7	7	7	7	7	7	7
	1997	117									8	8	8	8	8	8	8
	1998	129										9	9	9	9	9	9
	1999	135											9	9	9	9	9
	2000	156												10	10	10	10
	2001	171													11	11	11
	2002	187														12	12
	2003	205															14
	2004	223															
	2005	243															
	2006	264															
	2007	287															
	2008	311															
	2009	338															
	2010	348															
	Gross		0	0	67	140	220	307	403	509	627	756	891	1,047	1,219	1,406	1,611
	Acc Dep.			0	4	14	24	39	61	90	127	173	227	292	369	458	560
	Net		67	0	62	126	196	267	342	419	500	583	664	755	850	949	1,051
	Dep. Exp.			0	4	9	10	16	22	29	37	46	55	65	76	89	103

note: Contingencies' 1989 accumulated depreciation is included in office equipment due to nature of actual depreciation supplied by Bay Cablevision. Accordingly, pre 1990 costs & depreciation are included in the Office Equipment schedule.

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: A) 1% Annual Growth in Penetration Rate

11-Nov-90

DEPRECIATION SCHEDULES

Item	Added Cost	Depreciation Expense Allocation														
		1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Converters	Previous	261	33	33	33	33	33									
	Previous	182	23	23	23	23	23									
8 yr SL	Previous	218	27	27	27	27	27	27								
	Previous	90	11	11	11	11	11	11	11							
	Proforma Adj.	(502)	-63	-63	-63	-63	-63	-63	-63	-63						
	Subtotal	249														
	1990	64	7	7	7	7	7	7	7	7						
	1991	156		19	19	19	19	19	19	19	19					
	1992	132			17	17	17	17	17	17	17	17				
	1993	134				17	17	17	17	17	17	17	17			
	1994	141					18	18	18	18	18	18	18	18		
	1995	164						19	19	19	19	19	19	19	19	
	1996	169							21	21	21	21	21	21	21	21
	1997	178								22	22	22	22	22	22	22
	1998	187									23	23	23	23	23	23
	1999	187										23	23	23	23	23
	2000	207											26	26	26	26
	2001	164												21	21	21
	2002	173													22	22
	2003	182														23
	2004	191														
	2005	201														
	2006	211														
	2007	221														
	2008	233														
	2009	245														
	2010	245														
	Gross	249	303	459	592	726	857	1,020	1,190	1,368	1,554	1,741	1,948	2,112	2,255	2,467
	Acc Dep.	167	205	262	336	427	535	608	674	751	807	1,067	1,237	1,410	1,587	1,768
	Net	82	98	197	255	299	331	413	516	617	647	674	711	702	667	698
	Dep. Exp.		38	67	74	91	106	72	66	77	156	160	170	173	177	181

note: incorporates additional converter costs function for added subscribers

BERKELEY CAI SYSTEM FINANCIAL PROJECTION MODEL

Scenario: A) 1% Annual Growth in Penetration Rate

11-Nov-90

DEPRECIATION SCHEDULES

Item	Added Cost	Depreciation Expense Allocation															
		1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	
Vehicles 5 yr SL	Previous	0	0	0													
	Previous	10	2	2													
	Previous	10	2	2	2												
	Previous	10	2	2	2	2											
	Profoma Adj.	343	69	69	69	69	69										
	Subtotal	373															
	1990	27	5	5	5	5	5										
	1991	13		3	3	3	3	3									
	1992	13			3	3	3	3	3								
	1993	16				3	3	3	3	3							
	1994	17					3	3	3	3	3						
	1995	18						4	4	4	4	4					
	1996	22							4	4	4	4	4				
	1997	23								5	5	5	5	5			
	1998	24									5	5	5	5	5		
	1999	27										5	5	5	5	5	
	2000	30											6	6	6	6	
	2001	31												6	6	6	
	2002	36													6	6	
	2003	38														7	
	2004	40															8
	2005	46															
	2006	49															
	2007	51															
	2008	59															
	2009	62															
	2010	62															
		Gross	373	400	413	427	443	460	478	500	522	546	573	602	634	670	708
		Acc Dep.	197	277	360	443	527	613	629	646	666	686	709	734	760	790	822
	Net	176	123	54	0	0	0	0	0	0	0	0	0	0	0	0	
	Dep. Exp.		80	83	83	85	86	16	17	19	21	23	25	27	30	32	

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: A) 1% Annual Growth in Penetration Rate
11-Nov-90

DEPRECIATION SCHEDULES

Item	Added Cost	Depreciation Expense Allocation														
		1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Other																
Other Deferred Assets Gross Cost		1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603
Building Gross Cost		209.0	221.5	221.5	221.5	221.5	221.5	221.5	221.5	221.5	221.5	221.5	221.5	221.5	221.5	221.5
Building Depreciation		0.0	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
Deferred Asset Amortization		80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
Accumulated Building Dep.		0	7	15	22	30	37	44	52	59	66	74	81	89	96	103
Accumulated Amortization		0	80	160	240	321	401	481	561	641	721	802	882	962	1,042	1,122
Summary																
Gross PP&E Costs		11,222	11,785	12,098	13,193	13,715	14,209	14,750	15,349	16,000	16,705	17,435	18,267	19,066	19,938	20,883
Other Deferred Assets Gross Cost		1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603
Change in Gross			563	913	495	522	493	542	599	650	705	730	832	799	872	945
Acc. Dep. – PP&E		2,957	3,806	4,727	5,688	6,686	7,726	8,684	9,665	10,688	11,826	13,003	14,232	15,507	16,556	17,628
Depreciation Expense – PP&E		1,176	849	921	961	996	1,040	958	961	1,024	1,137	1,178	1,229	1,275	1,049	1,072
Acc. Dep & Amort		2,957	3,855	4,887	5,929	7,007	8,127	9,165	10,226	11,330	12,547	13,805	15,114	16,469	17,598	18,750
Gross Costs		12,826	13,388	14,301	14,798	15,318	15,812	16,353	16,953	17,603	18,308	19,038	19,870	20,670	21,541	22,486

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: A) 1% Annual Growth in Penetration Rate

INCOME STATEMENT (\$000s)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Revenues	\$3,002	\$3,050	\$4,484	\$4,827	\$5,213	\$5,638	\$6,103	\$6,606	\$7,150	\$7,732	\$8,362	\$9,044
Rev Growth %												
Operating Expense	2,333	2,306	2,489	2,676	2,876	3,096	3,337	3,598	3,880	4,180	4,506	4,858
Exp Growth %												
Operating Income	1,359	1,653	1,976	2,151	2,337	2,542	2,766	3,008	3,270	3,551	3,856	4,186
C.F. %	36.8%	41.8%	44.3%	44.6%	44.8%	45.1%	45.3%	45.5%	45.7%	45.9%	46.1%	46.3%
Less Other Expenses:												
Interest on Advances from Affiliates	1,582	1,582	1,646	1,721	1,740	1,751	1,746	1,736	1,716	1,682	1,631	1,559
Depreciation & Amortization	1,176	929	1,001	1,041	1,079	1,120	1,038	1,061	1,104	1,217	1,258	1,309
Corporate G&A	93	100	113	122	132	143	154	167	181	196	212	229
Mgt. Fees	258	276	312	337	364	394	426	461	499	540	584	631
Subtotal:	3,109	2,887	3,072	3,221	3,315	3,408	3,365	3,425	3,499	3,635	3,684	3,728
Taxable Income	(1,750)	(1,234)	(1,096)	(1,071)	(978)	(866)	(599)	(417)	(229)	(84)	171	457
Less:												
Income Taxes	(595)	(420)	(373)	(364)	(332)	(294)	(204)	(142)	(78)	(29)	58	155
Income Available	(1,155)	(815)	(723)	(707)	(645)	(571)	(395)	(275)	(151)	(55)	113	302

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: A) 1% Annual Growth in Penetration Rate

BALANCE SHEET (\$000s)

[illegible]

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: A) 1% Annual Growth in Penetration Rate

STATEMENT OF CASH FLOW (\$000s)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Net Income	(1,155)	(815)	(723)	(707)	(645)	(571)	(395)	(275)	(151)	(55)	113	302
Cash Available from Operations:												
Change In Non-Cash Current Assets	261	0	(14)	(16)	(18)	(19)	(21)	(23)	(24)	(26)	(27)	(29)
Depreciation & Amortization	1,176	929	1,001	1,041	1,079	1,120	1,038	1,061	1,104	1,217	1,258	1,309
Change In Current Liabilities	17	0	17	18	21	22	24	27	29	31	32	34
Cash From Financing:												
Debt From Affiliates	1,839	561	649	109	98	(45)	(91)	(175)	(290)	(444)	(626)	(763)
Cash From Investing:												
Capital Expenditures	(2,595)	(563)	(913)	(495)	(522)	(493)	(542)	(599)	(650)	(705)	(730)	(832)
Increase In Cash	(457)	113	16	11	12	13	14	15	17	18	19	21
Prior Year Cash	40	9	122	137	149	160	174	188	203	220	238	257
EOY Cash	9	122	137	149	160	174	188	203	220	238	257	278
	0	0	0	(0)	(0)	0	0	(0)	0	0	0	(0)

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: A) 1% Annual Growth in Penetration Rate

OTHER INFORMATION

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Homes Passed:												
Beginning	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000
Added	0	0	0	0	0	0	0	0	0	0	0	0
Ending	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000
Plant Miles												
Ariel												
Underground												
sub-total	178	178	178	178	178	178	178	178	178	178	178	178
Projected Subscribers												
Beginning	12,062	12,062	12,542	13,022	13,502	13,982	14,462	14,942	15,422	15,902	16,382	16,862
Added	0	480	480	480	480	480	480	480	480	480	480	480
Ending	12,062	12,542	13,022	13,502	13,982	14,462	14,942	15,422	15,902	16,382	16,862	17,342
Average	12,062	12,302	12,782	13,262	13,742	14,222	14,702	15,182	15,662	16,142	16,622	17,102
Penetration	25.1%	26.1%	27.1%	28.1%	29.1%	30.1%	31.1%	32.1%	33.1%	34.1%	35.1%	36.1%
Additional Outlets												
% of Basic	26.4%	26.4%	26.4%	26.4%	26.4%	26.4%	26.4%	26.4%	26.4%	26.4%	26.4%	26.4%
Average	3,188	3,251	3,378	3,505	3,632	3,759	3,886	4,013	4,139	4,266	4,393	4,520
Remote Control												
% of Basic	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%
Average	2,895	2,952	3,008	3,183	3,298	3,413	3,528	3,644	3,759	3,874	3,989	4,104
FM Service												
% of Basic	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Average	60	62	64	66	69	71	74	76	78	81	83	86
Premium Subscribers												
% of Basic	81.4%	81.4%	81.4%	81.4%	81.4%	81.4%	81.4%	81.4%	81.4%	81.4%	81.4%	81.4%
Average	9,823	10,018	10,409	10,800	11,191	11,582	11,973	12,364	12,755	13,146	13,537	13,927
Monthly Subscriber Rates												
Basic	\$14.84	\$15.82	\$17.50	\$18.25	\$19.04	\$19.91	\$20.87	\$21.89	\$22.99	\$24.14	\$25.37	\$26.69
Additional Outlets	\$3.80	\$4.00	\$4.16	\$4.33	\$4.52	\$4.73	\$4.96	\$5.20	\$5.46	\$5.73	\$6.02	\$6.34
Remote Converters	\$3.76	\$3.96	\$4.11	\$4.29	\$4.48	\$4.68	\$4.91	\$5.15	\$5.40	\$5.67	\$5.96	\$6.27
FM Service	\$1.00	\$1.68	\$1.75	\$1.82	\$1.90	\$1.99	\$2.08	\$2.18	\$2.29	\$2.41	\$2.53	\$2.66
Premium Service (Avg)	\$10.01	\$10.54	\$10.95	\$11.42	\$11.92	\$12.46	\$13.06	\$13.70	\$14.39	\$15.11	\$15.88	\$16.70

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: A) 1% Annual Growth in Penetration Rate

INCOME STATEMENT DETAIL (\$000s)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Revenues:												
Basic	\$2,148	\$2,306	\$2,684	\$2,905	\$3,139	\$3,398	\$3,682	\$3,988	\$4,320	\$4,675	\$5,000	\$5,476
Additional Outlets	145	156	168	182	197	213	231	250	271	293	318	344
Converters Rentals	131	140	151	164	177	192	208	225	244	264	285	309
Premium Service	1,181	1,267	1,368	1,481	1,600	1,732	1,877	2,033	2,202	2,383	2,579	2,791
Installation Misc.	45	45	47	49	51	52	54	56	58	60	61	63
Advertising	26	27	28	29	30	31	32	33	34	35	36	38
Other	8	9	9	9	10	10	10	11	11	11	12	12
Pay Per View	8	8	8	8	9	9	9	10	10	10	10	11
Total	3,692	3,959	4,464	4,827	5,213	5,638	6,103	6,606	7,150	7,732	8,362	9,044
Operating Expense:												
Fixed	188	195	202	211	220	230	241	253	266	279	293	308
Variable												
- Service (Distribution - Aerial)	198	205	213	223	232	243	255	267	280	294	309	326
- Service (Distribution - UG)	0	0	0	0	0	0	0	0	0	0	0	0
- Selling & Marketing	343	363	392	424	458	496	538	582	631	683	739	800
- Satellite Programming	153	161	174	189	204	221	239	259	281	304	329	356
- Microwave Service	0	0	0	1	1	1	1	1	1	1	1	1
- Other Admin	5	5	6	6	7	7	8	8	9	10	11	11
- Gen & Admin	575	609	657	711	768	832	901	976	1,057	1,144	1,238	1,340
- Copyright Fees	25	27	31	34	36	39	43	46	50	54	59	63
- Franchise Fees	170	183	206	223	240	260	281	305	330	356	386	417
- Bad Debt Collection	248	99	112	121	130	141	153	165	179	193	209	226
- HBO Service Expense (SE)	215	231	249	270	292	316	342	370	401	434	470	509
- Showtime SE	109	117	126	137	148	160	173	188	203	220	238	258
- Cinemax SE	32	35	38	41	44	47	51	56	60	65	71	77
- Disney SE	32	35	37	41	44	47	51	56	60	65	71	76
- Movie Channel SE	0	0	0	0	0	0	0	0	0	0	0	0
- Giant Vision SE	3	3	3	4	4	4	4	5	5	6	6	7
- Bravo SE	19	21	22	24	26	28	31	33	36	39	42	46
- Nostalgia SE	1	1	2	2	2	2	2	2	3	3	3	3
- AMC SE	10	11	12	13	14	15	17	18	19	21	23	25
- Pay Per View SE	5	5	5	6	6	7	7	8	8	9	10	11
Total	2,333	2,306	2,489	2,676	2,876	3,096	3,337	3,596	3,880	4,180	4,506	4,858
Operating Income	1,359	1,653	1,976	2,151	2,337	2,542	2,766	3,008	3,270	3,551	3,856	4,186

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: A) 1% Annual Growth in Penetration Rate

INCOME STATEMENT DETAIL (cont.)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Other Expenses:												
Depreciation and												
Amortization	1,176	929	1,001	1,041	1,079	1,120	1,038	1,061	1,104	1,217	1,258	1,309
Principle Repayment to Affiliates	(1,839)	(561)	(649)	(109)	(98)	45	91	175	290	444	626	763
Interest on Advances from affiliates	1,582	1,582	1,646	1,721	1,740	1,751	1,746	1,736	1,716	1,682	1,631	1,559
Corporate G&A	93	100	113	122	132	143	154	167	181	196	212	229
Mgt. Fees	258	276	312	337	364	394	426	461	499	540	584	631

Scenario: A) 1% Annual Growth in Penetration Rate

[illegible]

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: A) 1% Annual Growth in Penetration Rate

OUTPUT SECTION

[illegible]

SCENARIO B - FINANCIAL PROJECTIONS

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: B) 2% Annual Growth in Penetration Rate

INCOME STATEMENT (\$000s)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Revenues	\$3,692	\$4,035	\$4,716	\$5,264	\$5,850	\$6,494	\$7,199	\$7,963	\$8,793	\$9,686	\$10,655	\$11,709
Rev Growth %												
Operating Expense	2,333	2,343	2,605	2,879	3,172	3,495	3,848	4,230	4,646	5,092	5,577	6,103
Exp Growth %												
Operating Income	1,359	1,693	2,110	2,384	2,677	2,999	3,351	3,733	4,147	4,594	5,078	5,606
C.F. %	36.8%	41.9%	44.8%	45.3%	45.8%	46.2%	46.6%	46.9%	47.2%	47.4%	47.7%	47.9%
Less Other Expenses:												
Interest on Advances from Affiliates	1,582	1,582	1,644	1,718	1,730	1,727	1,700	1,658	1,595	1,507	1,386	1,228
Depreciation & Amortization	1,176	929	1,007	1,054	1,098	1,146	1,072	1,103	1,153	1,276	1,320	1,377
Corporate G&A	93	102	119	133	148	164	182	201	222	245	270	296
Mgt. Fees	<u>258</u>	<u>282</u>	<u>329</u>	<u>367</u>	<u>408</u>	<u>453</u>	<u>503</u>	<u>556</u>	<u>614</u>	<u>676</u>	<u>744</u>	<u>817</u>
Subtotal:	3,109	2,895	3,100	3,272	3,385	3,492	3,457	3,518	3,585	3,704	3,720	3,719
Taxable Income	(1,750)	(1,202)	(989)	(888)	(707)	(492)	(105)	215	562	890	1,358	1,887
Less:												
Income Taxes	<u>(595)</u>	<u>(409)</u>	<u>(336)</u>	<u>(302)</u>	<u>(240)</u>	<u>(167)</u>	<u>(36)</u>	<u>73</u>	<u>191</u>	<u>303</u>	<u>462</u>	<u>642</u>
Income Available	(1,155)	(793)	(653)	(586)	(467)	(325)	(70)	142	371	587	896	1,245

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: B) 2% Annual Growth in Penetration Rate

BALANCE SHEET (\$000s)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
ASSETS												
Current Assets:												
Cash	9	124	145	162	180	200	222	245	271	298	328	360
Accounts Receivable	139	139	145	150	157	163	171	179	188	197	207	218
Allowance for Bad Debts	(45)	(45)	(46)	(48)	(50)	(52)	(55)	(57)	(60)	(63)	(66)	(70)
Other	<u>289</u>	<u>289</u>	<u>300</u>	<u>312</u>	<u>325</u>	<u>339</u>	<u>354</u>	<u>371</u>	<u>390</u>	<u>409</u>	<u>430</u>	<u>452</u>
sub-total	393	508	543	576	612	650	692	738	788	841	898	960
Long Term Assets:												
Gross Plant and Equipment	11,222	11,785	12,762	13,324	13,916	14,482	15,100	15,780	16,514	17,307	18,126	19,056
Gross Deferred Assets	<u>1,603</u>	<u>1,603</u>	<u>1,603</u>	<u>1,603</u>	<u>1,603</u>	<u>1,603</u>	<u>1,603</u>	<u>1,603</u>	<u>1,603</u>	<u>1,603</u>	<u>1,603</u>	<u>1,603</u>
sub-total	12,826	13,388	14,365	14,927	15,519	16,086	16,704	17,383	18,117	18,911	19,730	20,659
Less Accumulated Depreciation & Amortization	2,957	3,886	4,893	5,947	7,045	8,192	9,264	10,366	11,520	12,798	14,116	15,493
Net Plant & Equipment	9,868	9,502	9,472	8,980	8,474	7,894	7,440	7,017	6,598	6,115	5,614	5,167
TOTAL ASSETS	10,261	10,010	10,015	9,555	9,085	8,544	8,132	7,755	7,386	6,957	6,512	6,127
LIABILITIES & OWNERS EQUITY												
Current Liabilities	454	454	470	489	510	532	556	583	612	642	674	709
Advances from Affiliates	13,755	14,296	14,938	15,046	15,021	14,783	14,416	13,870	13,101	12,055	10,681	9,016
Retained Earnings	<u>(3,947)</u>	<u>(4,740)</u>	<u>(5,393)</u>	<u>(5,979)</u>	<u>(6,446)</u>	<u>(6,771)</u>	<u>(6,840)</u>	<u>(6,698)</u>	<u>(6,327)</u>	<u>(5,740)</u>	<u>(4,843)</u>	<u>(3,598)</u>
Total	10,262	10,010	10,015	9,555	9,085	8,544	8,132	7,755	7,386	6,957	6,512	6,127
Difference to Assets	(0)	0	0	0	0	0	0	0	0	(0)	0	0

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: B) 2% Annual Growth in Penetration Rate
11-Nov-90

DEPRECIATION SCHEDULES

DEPRECIATION SCHEDULE		Depreciation Expense Allocation														
Item	Added Cost	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Other																
Other Deferred Assets Gross Cost		1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603
Building Gross Cost		209.0	221.5	221.5	221.5	221.5	221.5	221.5	221.5	221.5	221.5	221.5	221.5	221.5	221.5	221.5
Building Depreciation		0.0	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
Deferred Asset Amortization		80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
Accumulated Building Dep.		0	7	15	22	30	37	44	52	59	66	74	81	89	96	103
Accumulated Amortization		0	80	160	240	321	401	481	561	641	721	802	882	962	1,042	1,122
Summary																
Gross PP&E Costs		11,222	11,785	12,762	13,324	13,918	14,482	15,100	15,780	16,514	17,307	18,126	19,056	19,855	20,727	21,672
Other Deferred Assets Gross Cost		1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603
Change in Gross			563	977	562	592	506	618	679	734	793	819	930	799	872	945
Acc. Dep. - PP&E		2,957	3,806	4,733	5,707	6,725	7,791	8,783	9,805	10,878	12,074	13,314	14,611	15,949	17,057	18,183
Depreciation Expense - PP&E		1,176	849	927	974	1,018	1,066	992	1,022	1,073	1,196	1,240	1,297	1,338	1,107	1,126
Acc. Dep & Amort		2,957	3,886	4,893	5,947	7,045	8,192	9,264	10,366	11,520	12,796	14,116	15,493	16,911	18,099	19,305
Gross Costs		12,826	13,388	14,365	14,927	15,519	16,085	16,704	17,383	18,117	18,911	19,730	20,659	21,459	22,331	23,275

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: B) 2% Annual Growth in Penetration Rate

STATEMENT OF CASH FLOW (\$000s)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Net Income	(1,155)	(793)	(653)	(586)	(467)	(325)	(70)	142	371	587	896	1,245
Cash Available from Operations:												
Change in Non-Cash Current Assets	261	0	(14)	(16)	(18)	(19)	(21)	(23)	(24)	(26)	(27)	(29)
Depreciation & Amortization	1,176	929	1,007	1,054	1,098	1,146	1,072	1,103	1,153	1,276	1,320	1,377
Change in Current Liabilities	17	0	17	18	21	22	24	27	29	31	32	34
Cash From Financing:												
Debt From Affiliates	1,839	542	642	108	(25)	(239)	(366)	(546)	(769)	(1,047)	(1,373)	(1,665)
Cash From Investing:												
Capital Expenditures	(2,506)	(563)	(977)	(562)	(592)	(566)	(618)	(679)	(734)	(793)	(819)	(930)
Increase in Cash	(457)	115	21	17	18	20	22	24	26	27	30	32
Prior Year Cash	40	9	124	145	162	180	200	222	245	271	298	328
EOY Cash	9	124	145	162	180	200	222	245	271	298	328	360
		0	(0)	(0)	0	0	(0)	0	(0)	0	0	(0)

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: B) 2% Annual Growth in Penetration Rate

OTHER INFORMATION

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Homes Passed:												
Beginning	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000
Added	0	0	0	0	0	0	0	0	0	0	0	0
Ending	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000
Plant Miles												
Ariel												
Underground												
sub-total	178	178	178	178	178	178	178	178	178	178	178	178
Projected Subscribers												
Beginning	12,082	12,082	13,022	13,982	14,942	15,902	16,862	17,822	18,782	19,742	20,702	21,662
Added	0	900	900	900	900	900	900	900	900	900	900	900
Ending	12,082	13,022	13,982	14,942	15,902	16,862	17,822	18,782	19,742	20,702	21,662	22,622
Average	12,082	12,542	13,502	14,462	15,422	16,382	17,342	18,302	19,262	20,222	21,182	22,142
Penetration	25.1%	27.1%	29.1%	31.1%	33.1%	35.1%	37.1%	39.1%	41.1%	43.1%	45.1%	47.1%
Additional Outlets												
% of Basic	26.4%	26.4%	26.4%	26.4%	26.4%	26.4%	26.4%	26.4%	26.4%	26.4%	26.4%	26.4%
Average	3,188	3,315	3,509	3,822	4,076	4,330	4,584	4,837	5,091	5,345	5,598	5,852
Remote Control												
% of Basic	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%
Average	2,895	3,010	3,240	3,471	3,701	3,932	4,162	4,392	4,623	4,853	5,084	5,314
FM Service												
% of Basic	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Average	60	63	68	72	77	82	87	92	96	101	106	111
Premium Subscribers												
% of Basic	81.4%	81.4%	81.4%	81.4%	81.4%	81.4%	81.4%	81.4%	81.4%	81.4%	81.4%	81.4%
Average	9,823	10,214	10,906	11,778	12,559	13,341	14,123	14,905	15,687	16,468	17,250	18,032
Monthly Subscriber Rates												
Basic	\$14.84	\$15.62	\$17.50	\$18.25	\$19.04	\$19.91	\$20.87	\$21.89	\$22.90	\$24.14	\$25.37	\$26.60
Additional Outlets	\$3.80	\$4.00	\$4.16	\$4.33	\$4.52	\$4.73	\$4.96	\$5.20	\$5.46	\$5.73	\$6.02	\$6.34
Remote Converters	\$3.76	\$3.96	\$4.11	\$4.29	\$4.48	\$4.68	\$4.91	\$5.15	\$5.40	\$5.67	\$5.96	\$6.27
FM Service	\$1.60	\$1.68	\$1.75	\$1.82	\$1.90	\$1.99	\$2.08	\$2.18	\$2.29	\$2.41	\$2.53	\$2.66
Premium Service (Avg)	\$10.01	\$10.54	\$10.95	\$11.42	\$11.92	\$12.46	\$13.06	\$13.70	\$14.39	\$15.11	\$15.88	\$16.70

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: B) 2% Annual Growth in Penetration Rate

INCOME STATEMENT DETAIL (\$000s)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Revenues:												
Basic	\$2,148	\$2,351	\$2,835	\$3,168	\$3,523	\$3,915	\$4,343	\$4,808	\$5,313	\$5,857	\$6,448	\$7,090
Additional Outlets	145	159	178	199	221	248	273	302	333	368	405	445
Converters Rentals	131	143	160	179	199	221	245	271	300	330	364	400
Premium Service	1,181	1,292	1,445	1,615	1,796	1,995	2,214	2,451	2,708	2,985	3,286	3,614
Installation Misc.	45	48	49	53	57	60	64	67	71	74	78	81
Advertising	26	28	30	32	34	36	38	40	42	44	46	49
Other	8	9	9	10	11	11	12	13	13	14	15	15
Pay Per View	8	8	8	9	10	10	11	11	12	13	13	14
Total	3,092	4,035	4,716	5,264	5,850	6,494	7,199	7,963	8,793	9,686	10,655	11,709
Operating Expenses:												
Fixed	188	195	202	211	220	230	241	253	266	279	293	308
Variable												
- Service (Distribution - Aerial)	198	205	213	223	232	243	255	267	280	294	309	326
- Service (Distribution - UG)	0	0	0	0	0	0	0	0	0	0	0	0
- Selling & Marketing	343	370	414	463	516	572	634	702	776	855	942	1,035
- Satellite Programming	153	165	184	206	229	254	282	312	345	380	419	461
- Microwave Service	0	0	0	1	1	1	1	1	1	1	1	1
- Other Admin	5	5	6	7	7	8	9	10	11	12	13	15
- Gen & Admin	575	620	694	775	862	958	1,063	1,177	1,300	1,433	1,578	1,735
- Copyright Fees	25	27	33	37	41	45	50	56	61	68	75	82
- Franchise Fees	170	186	217	243	270	299	332	367	405	447	491	540
- Bad Debt Collection	248	101	118	132	146	162	180	199	220	242	266	293
- HBO Service Expense (SE)	215	235	263	294	327	364	403	447	493	544	599	659
- Showtime SE	109	119	133	149	166	184	204	226	250	276	303	334
- Cinemax SE	32	35	40	44	49	55	61	67	74	82	90	99
- Disney SE	32	35	40	44	49	55	61	67	74	82	90	99
- Movie Channel SE	0	0	0	0	0	0	0	0	0	0	0	0
- Giant Vision SE	3	3	3	4	4	5	5	6	6	7	8	9
- Bravo SE	19	21	24	26	29	33	36	40	44	49	54	59
- Nostalgia SE	1	2	2	2	2	2	3	3	3	4	4	4
- AMC SE	10	11	13	14	16	18	20	22	24	26	29	32
- Pay Per View SE	5	5	5	6	7	8	8	9	10	11	12	14
Total	2,333	2,343	2,605	2,879	3,172	3,495	3,848	4,230	4,646	5,092	5,577	6,103
Operating Income	1,359	1,693	2,110	2,384	2,677	2,999	3,351	3,733	4,147	4,594	5,078	5,606

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: B) 2% Annual Growth in Penetration Rate

INCOME STATEMENT DETAIL (cont.)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Other Expenses:												
Depreciation and Amortization	1,176	929	1,007	1,054	1,098	1,146	1,072	1,103	1,153	1,276	1,320	1,377
Principle Repayment to Affiliates	(1,839)	(542)	(642)	(108)	25	239	366	546	769	1,047	1,373	1,665
Interest on Advances from affiliates	1,582	1,582	1,644	1,718	1,730	1,727	1,700	1,658	1,595	1,507	1,386	1,228
Corporate G&A	93	102	119	133	148	164	182	201	222	245	270	296
Mgt. Fees	258	282	329	367	408	453	503	556	614	676	744	817

Scenario: B) 2% Annual Growth in Penetration Rate

[illegible]

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: B) 2% Annual Growth in Penetration Rate

OUTPUT SECTION

[illegible]

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: B) 2% Annual Growth in Penetration Rate

ASSUMPTIONS & CALCULATIONS

BERKLEY SYSTEM:

o 1990 BASIC SUBSCRIBERS:	12,062	
o 1990 PREMIUM SUBSCRIBERS:	9,823	
o 1990 WIEGHTED AVERAGE BASIC SUBSCRIBER RATE:		
$((\$15.95 * 10,750) + (\$29.95 * 13) + (\$12.75 * 1290)) / (10,750 + 13 + 1,290) =$		\$15.62
o 1990 WIEGHTED AVERAGE PAY SERVICES RATE:		
$((\$10.95 * (4,651 + 2,852)) + (\$9.95 * 896) + (\$7.95 * 858) + (\$10 * 500)) / (4,651 + 2,852 + 896 + 858 + 500) =$		\$10.54
o TOTAL HOMES PASSED:*	48,000	
o NUMBER OF SUBSCRIBERS WITH ADDITIONAL OUTLETS:	3,188	
o TOTAL PLANT MILES:	178	
o ADDITIONAL CONVERTER CHARGE:	\$64	
o ADDITIONAL DROP CHARGE:	\$60	

* TOTAL HOMES PASSED NUMBER IS BASED UPON CITY POPULATION, AND DIFFERS FROM VALUES SUBMITTED BY THE CITY.

TOTAL BAY CABLEVISION SYSTEM:

o 1990 BASIC SUBSCRIBERS:	39,496	
o INITIAL INSTALLATION CHARGE:	\$30	
o SUBSEQUENT INSTALLATION/VISITATION CHARG	\$25	
o INSTALLATION CHARGE FOR ADDITIONAL OUTLE	\$8	
o MONTHLY CHARGE FOR ADDITIONAL OUTLETS:	\$4	
o TOTAL PLANT MILES:	548	
LENFEST'S COST OF DEBT:	11.50%	

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: B) 2% Annual Growth in Penetration Rate

ALLOCATION OF 1989 SYSTEM REVENUE TO BERKELEY:

	<u>SYSTEM VALUE</u>	<u>ALLOCATION BASIS TO BERKELEY</u>
- BASIC	\$0,627,982	
- PREMIUM:		
— HBO	\$2,008,543	
— SHOWTIME	\$1,000,715	
— CINEMAX	\$373,972	
— DISNEY	\$240,350	
— MOVIE CHANNEL	\$0	
— GIANT VISION	\$17,375	
SUB-TOTAL	\$3,640,955	
- PAY PER VIEW	\$24,773	\$0.63 PER SUB
- INSTALLATION	\$423,426	
- CONVERTER RENTAL	\$321,949	
- ADVERTISING	\$86,649	\$2.19 PER SUB
- OTHER:		
— LATE CHARGES	\$1,268	
— RENTAL INCOME	\$14,520	
— OTHER	\$11,685	
SUB-TOTAL	\$27,473	\$0.70 PER SUB
TOTAL REVENUE	\$11,153,207	

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: B) 2% Annual Growth in Penetration Rate

ALLOCATION OF 1989 SYSTEM EXPENSES TO BERKELEY:

	<u>SYSTEM AMOUNT</u>	<u>ALLOCATION BASIS TO BERKELEY</u>
A) FIXED:		
- SERVICE	\$100,000	\$3
- LOCAL ORIGINATION	\$87,219	\$2
- GEN & ADMIN	\$200,000	\$5
SUB-TOTAL	\$387,219	\$10 PER BASIC SUBSCRIBER
B) PER PLANT MILE:		
- SERVICE	\$610,032	\$1,113 PER PLANT MILE
C) PER BASIC SUBSCRIBER:		
- SELLING & MARKETING	\$1,124,182	\$28
- SATELLITE PROGRAMMING	\$499,987	\$13
- MICROWAVE SERVICE	\$1,342	\$0
- OTHER ADMIN.	\$16,006	\$0
- GEN & ADMIN	\$1,884,150	\$48
SUB-TOTAL	\$3,525,667	\$89 PER BASIC SUBSCRIBER
D) PER BASIC REVENUE:		
- COPYRIGHT FEES	\$76,696	1.2% PER BASIC REVENUE DOLLAR
E) PER TOTAL REVENUES:		
- FRANCHISE FEES	\$514,235	4.6%
- CORP. G&A	\$282,193	2.5%
- BAD DEBT COLLECTION	\$750,655	6.7% (note: bad debt expenses lowered to 2.5% of revenues for 1990 and on)
- MGT FEES	\$778,680	7.0%
SUB-TOTAL	\$2,325,663	20.9% PER TOTAL REVENUE DOLLAR
F) PER PREMIUM REVENUE:		
- HBO SERVICE EXP (SE)	\$663,437	18.2%
- SHOWTIME SE	\$336,072	9.2%
- CINEMAX SE	\$99,805	2.7%
- DISNEY SE	\$99,612	2.7%
- MOVIE CHANNEL SE	\$0	0.0%
- GIANT VISION SE	\$8,613	0.2%
- BRAVO SE	\$59,349	1.6%
- NOSTAGIA SE	\$4,276	0.1%
- AMC SE	\$32,085	0.9%
SUB-TOTAL	\$1,303,249	35.8% PER PREMIUM REVENUE DOLLAR
G) PER PAY PER VIEW REVENUE:		
	\$14,817	59.8% PER PAY PER VIEW DOLLAR

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: B) 2% Annual Growth in Penetration Rate

NET FLOW (\$000):

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Revenues	\$3,692	\$4,035	\$4,716	\$5,264	\$5,850	\$6,494	\$7,199	\$7,963	\$8,793	\$9,686	\$10,655	\$11,709
Operating Expense	<u>2,333</u>	<u>2,343</u>	<u>2,605</u>	<u>2,879</u>	<u>3,172</u>	<u>3,495</u>	<u>3,848</u>	<u>4,230</u>	<u>4,646</u>	<u>5,092</u>	<u>5,577</u>	<u>6,103</u>
Operating Income	1,359	1,693	2,110	2,384	2,677	2,999	3,351	3,733	4,147	4,594	5,078	5,606
Capital Expenditures	<u>2,596</u>	<u>563</u>	<u>977</u>	<u>562</u>	<u>502</u>	<u>566</u>	<u>618</u>	<u>679</u>	<u>734</u>	<u>793</u>	<u>819</u>	<u>930</u>
Net Flow	(1,237)	1,130	1,133	1,822	2,086	2,433	2,733	3,054	3,413	3,800	4,260	4,676

ESTIMATED BERKELEY PORTION OF TOTAL 9 BAY CABLEVISION SYSTEM'S BALANCE SHEET

	SYSTEM GROSS	SYSTEM DEPRECIATION	SYSTEM NET	BERKLEY GROSS	BERKLEY DEPRECIATION	BERKLEY NET	% OF TOTAL	ALLOCATION BASIS
<u>LONG TERM ASSETS</u>								
LAND & BUILDINGS	\$844,323	\$909	\$843,414	\$209,287	\$295	\$208,992	32.5%	PER PLANT MILE
DROPS	\$3,732	\$0	\$3,732	\$1,140	\$0	\$1,140	30.5%	PER BASIC SUB.
OFFICE EQUIP & FIXTURES/CONFI	\$178,780	\$75,574	\$103,206	\$54,599	\$23,080	\$31,519	30.5%	PER BASIC SUB.
HEADEND	\$1,457,549	\$594,517	\$863,032	\$445,133	\$181,594	\$263,539	30.5%	PER BASIC SUB.
VECHILES & EQUIPMENT	\$1,221,742	\$844,718	\$577,024	\$373,118	\$196,896	\$176,222	30.5%	PER BASIC SUB.
CONVERTERS	\$818,487	\$547,159	\$269,308	\$249,347	\$167,101	\$82,246	30.5%	PER BASIC SUB.
DISTRIBUTION	<u>\$30,448,589</u>	<u>\$7,353,585</u>	<u>\$23,095,004</u>	<u>\$9,890,235</u>	<u>\$2,388,573</u>	<u>\$7,501,662</u>	32.5%	PER PLANT MILE
Sub-Total:	\$34,771,182	\$9,216,462	\$25,554,720	\$11,222,859	\$2,957,510	\$8,265,349		
DEFERRED ASSETS	<u>\$5,249,875</u>	<u>\$0</u>	<u>\$5,249,875</u>	<u>\$1,003,301</u>	<u>\$0</u>	<u>\$1,003,301</u>	30.5%	PER BASIC SUB.
Sub-Total:	\$40,021,057	\$9,216,462	\$30,804,595	\$12,826,160	\$2,957,510	\$9,868,650		
<u>CURRENT ASSETS</u>								
CASH	\$29,517	\$0	\$29,517	\$9,014	\$0	\$9,014	30.5%	PER SUB
ACCOUNTS RECIEVABLE	\$456,326	\$0	\$456,326	\$139,361	\$0	\$139,361	30.5%	PER SUB
ALLOWANCE FOR BAD DEBTS	(\$146,000)	\$0	(\$146,000)	(\$44,588)	\$0	(\$44,588)	30.5%	PER SUB
OTHER	<u>\$946,714</u>	<u>\$0</u>	<u>\$946,714</u>	<u>\$289,125</u>	<u>\$0</u>	<u>\$289,125</u>	30.5%	PER SUB
Sub-Total:	\$1,286,557	\$0	\$1,286,557	\$392,912	\$0	\$392,912		
Total Assets:	\$41,307,614	\$9,216,462	\$32,091,152	\$13,219,072	\$2,957,510	\$10,261,562		
<u>LIABILITIES & EQUITY</u>								
CURRENT LIABILITIES	\$1,418,800	NA	\$1,418,800	\$453,099	NA	\$453,099	32.0%	PER BERKELEY ASSETS/
ADVANCES FROM AFFILIATES	\$43,014,975	NA	\$43,014,975	\$13,754,597	NA	\$13,754,597	32.0%	SYSTEM ASSETS RATIO
RETAINED EARNINGS	(\$12,342,886)	NA	(\$12,342,886)	(\$3,946,734)	NA	(\$3,946,734)	32.0%	
Total Liabilities and Equity:			\$32,091,149	NA		\$10,261,561		

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: B) 2% Annual Growth in Penetration Rate
11-Nov-90

DEPRECIATION SCHEDULES

Item	Added Cost	Depreciation Expense Allocation													2000	2001	2002	2003
		1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001				
Headend	302		20	20	20	20	20	20	20	20	20	20	20	20				
15 yr SL	15		1	1	1	1	1	1	1	1	1	1	1	1				
	14		1	1	1	1	1	1	1	1	1	1	1	1				
	18		1	1	1	1	1	1	1	1	1	1	1	1				
Profoma Adj.	98		7	7	7	7	7	7	7	7	7	7	7	7				
Subtotal	445																	
1990	7		0	0	0	0	0	0	0	0	0	0	0	0				
1991	20			1	1	1	1	1	1	1	1	1	1	1				
1992	22				1	2	2	2	2	2	2	2	2	2				
1993	25						2	2	2	2	2	2	2	2				
1994	27							2	2	2	2	2	2	2				
1995	30								2	2	2	2	2	2				
1996	32									2	2	2	2	2				
1997	35										3	3	3	3				
1998	39											3	3	3				
1999	40												3	3				
2000	46													3				
2001	50																	
2002	55																	
2003	59																	
2004	64																	
2005	70																	
2006	75																	
2007	82																	
2008	88																	
2009	95																	
2010	98																	
Gross		445	452	473	495	520	547	576	609	644	683	723	769	819				
Acc Dep.		182	212	243	276	311	347	386	426	469	515	563	614	669				
Net		264	240	229	219	209	199	190	182	175	168	160	155	150				
Dep. Exp.			30	32	33	35	36	38	41	43	46	48	51	55				

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: B) 2% Annual Growth in Penetration Rate

11-Nov-90

DEPRECIATION SCHEDULES

Item	Added Cost	Depreciation Expense Allocation														
		1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Distribution 15 yr SL	Previous	3,535	242	242	242	242	242	242	242	242	242	242	242	242		
	Previous	196	13	13	13	13	13	13	13	13	13	13	13	13		
	Previous	444	30	30	30	30	30	30	30	30	30	30	30	30	30	
	Previous	467	31	31	31	31	31	31	31	31	31	31	31	31	31	31
	Profoma Adj.	5,148	343	343	343	343	343	343	343	343	343	343	343	343	343	343
	Subtotal	9,890														
	1990	380	25	25	25	25	25	25	25	25	25	25	25	25	25	25
	1991	556		37	37	37	37	37	37	37	37	37	37	37	37	37
	1992	178			12	12	12	12	12	12	12	12	12	12	12	12
	1993	195				13	13	13	13	13	13	13	13	13	13	13
	1994	150					10	10	10	10	10	10	10	10	10	10
	1995	166						11	11	11	11	11	11	11	11	11
	1996	185							12	12	12	12	12	12	12	12
	1997	205								14	14	14	14	14	14	14
	1998	227									15	15	15	15	15	15
	1999	239										16	16	16	16	16
	2000	278											19	19	19	19
	2001	306													20	20
	2002	337														22
	2003	369														
	2004	404														
	2005	441														
	2006	481														
	2007	524														
	2008	571														
	2009	621														
	2010	642														
	Gross	9,890	10,270	10,826	11,004	11,198	11,348	11,513	11,698	11,903	12,131	12,370	12,648	12,954	13,290	13,660
	Acc Dep.	2,389	3,073	3,794	4,528	5,274	6,030	6,797	7,577	8,370	9,178	10,003	10,845	11,709	12,339	12,965
	Net	7,501	7,197	7,032	6,476	5,924	5,318	4,716	4,121	3,533	2,952	2,367	1,802	1,245	951	695
	Dep. Exp.		684	721	733	746	756	767	780	793	808	824	843	863	831	826

note: Incorporates additional costs function for added aerial and underground miles

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: B) 2% Annual Growth in Penetration Rate
11-Nov-90

DEPRECIATION SCHEDULES

DEPRECIATION SCHEDULES		Depreciation Expense Allocation														
Item	Added Cost	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Drops	Previous 1354		90	90	90	90	90	90	90	90	90	90	90	90		
15 yr SL	Previous 17		1	1	1	1	1	1	1	1	1	1	1	1		
	Previous 38		3	3	3	3	3	3	3	3	3	3	3	3		
	Previous 42		3	3	3	3	3	3	3	3	3	3	3	3		
	Profoma Adj. (1,450)		-97	-97	-97	-97	-97	-97	-97	-97	-97	-97	-97	-97		
	Subtotal 1															
	1990 0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1991 117			8	8	8	8	8	8	8	8	8	8	8	8	8
	1992 92				6	6	6	6	6	6	6	6	6	6	6	6
	1993 87					6	6	6	6	6	6	6	6	6	6	6
	1994 87						6	6	6	6	6	6	6	6	6	6
	1995 92							6	6	6	6	6	6	6	6	6
	1996 98								7	7	7	7	7	7	7	7
	1997 104									7	7	7	7	7	7	7
	1998 111										7	7	7	7	7	7
	1999 112											7	7	7	7	7
	2000 126												8	8	8	8
	2001 35													2	2	2
	2002 38														3	3
	2003 42															3
	2004 48															
	2005 51															
	2006 55															
	2007 61															
	2008 66															
	2009 72															
	2010 75															
	Gross	1	1	118	210	297	384	476	574	678	789	901	1,027	1,081	1,100	1,142
	Acc Dep.	0	0	8	22	42	67	99	137	183	235	295	364	434	508	584
	Net	1	1	110	188	256	316	377	436	495	554	606	663	627	592	558
	Dep. Exp.		0	8	14	20	26	32	38	45	53	60	68	71	73	76

note: Incorporates additional drop costs function for added subscribers

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: B) 2% Annual Growth in Penetration Rate
11-Nov-00

DEPRECIATION SCHEDULES

Item	Added Cost	Depreciation Expense Allocation														
		1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Fixtures,	Previous	0	0	0	0	0	0	0	0	0	0	0	0	0		
Furniture, &	Previous	10	1	1	1	1	1	1	1	1	1	1	1	1		
Office Equip	Previous	11	1	1	1	1	1	1	1	1	1	1	1	1	1	
15 yr SL	Previous	12	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Proforma Adj.	22	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Subtotal	55														
	1990	82	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	1991	15		1	1	1	1	1	1	1	1	1	1	1	1	1
	1992	17			1	1	1	1	1	1	1	1	1	1	1	1
	1993	19				0	0	0	0	0	0	0	0	0	0	0
	1994	21					1	1	1	1	1	1	1	1	1	1
	1995	23						2	2	2	2	2	2	2	2	2
	1996	26							2	2	2	2	2	2	2	2
	1997	28								2	2	2	2	2	2	2
	1998	31									2	2	2	2	2	2
	1999	33										2	2	2	2	2
	2000	38											3	3	3	3
	2001	42												3	3	3
	2002	46													3	3
	2003	50														3
	2004	54														
	2005	59														
	2006	64														
	2007	70														
	2008	76														
	2009	82														
	2010	85														
	Gross	55	137	152	169	187	208	231	257	285	316	349	387	428	474	524
	Acc Dep.	23	32	42	54	66	78	93	109	128	148	170	195	223	253	286
	Net	32	104	109	115	122	130	138	148	158	169	179	192	205	221	238
	Dep. Exp.		9	10	11	12	13	15	16	18	20	22	25	28	30	33

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: B) 2% Annual Growth in Penetration Rate
11-Nov-90

DEPRECIATION SCHEDULES

Item	Added Cost	Depreciation Expense Allocation													2002	2003
		1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001		
Contingencies	Previous	0	0	0	0	0	0	0	0	0	0	0	0	0		
15 yr SL	Previous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Previous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Previous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Subtotal	0														
	1990	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1991	67		4	4	4	4	4	4	4	4	4	4	4	4	4
	1992	73			5	5	5	5	5	5	5	5	5	5	5	5
	1993	80				0	0	0	0	0	0	0	0	0	0	0
	1994	87					6	6	6	6	6	6	6	6	6	6
	1995	96						6	6	6	6	6	6	6	6	6
	1996	106							7	7	7	7	7	7	7	7
	1997	117								8	8	8	8	8	8	8
	1998	129									9	9	9	9	9	9
	1999	135										9	9	9	9	9
	2000	150											10	10	10	10
	2001	171												11	11	11
	2002	187													12	12
	2003	205														14
	2004	223														
	2005	243														
	2006	264														
	2007	287														
	2008	311														
	2009	338														
	2010	348														
	Gross	0	0	67	140	220	307	403	509	627	756	891	1,047	1,219	1,406	1,611
	Acc Dep.		0	4	14	24	39	61	90	127	173	227	292	369	458	560
	Net	67	0	62	126	196	267	342	419	500	583	664	755	850	949	1,051
	Dep. Exp.		0	4	9	10	16	22	29	37	46	55	65	76	89	103

note: Contingencies' 1989 accumulated depreciation is included in office equipment due to nature of actual depreciation supplied by Bay
Cablevision. Accordingly, pre 1990 costs & depreciation are included in the Office Equipment schedule.

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: B) 2% Annual Growth in Penetration Rate
11-Nov-90

DEPRECIATION SCHEDULES

		Depreciation Expense Allocation														
Item	Added	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
	Cost															
Converters	Previous	201	33	33	33	33	33									
	Previous	182	23	23	23	23	23									
8 yr SL	Previous	218	27	27	27	27	27	27								
	Previous	90	11	11	11	11	11	11	11							
	Profoma Adj.	(502)	-63	-63	-63	-63	-63	-63	-63	-63						
	Subtotal	249														
	1990	54	7	7	7	7	7	7	7	7						
	1991	189		24	24	24	24	24	24	24	24					
	1992	167			21	21	21	21	21	21	21	21				
	1993	170				21	21	21	21	21	21	21	21			
	1994	178					22	22	22	22	22	22	22	22		
	1995	193						24	24	24	24	24	24	24	24	
	1996	211							26	26	26	26	26	26	26	26
	1997	221								28	28	28	28	28	28	28
	1998	232									29	29	29	29	29	29
	1999	232										29	29	29	29	29
	2000	257											32	32	32	32
	2001	164												21	21	21
	2002	173													22	22
	2003	182														23
	2004	191														
	2005	201														
	2006	211														
	2007	221														
	2008	233														
	2009	245														
	2010	245														
	Gross	249	303	492	659	829	1,008	1,201	1,412	1,633	1,865	2,098	2,355	2,519	2,692	2,874
	Acc Dep.	167	205	267	349	453	579	673	767	877	1,073	1,273	1,485	1,697	1,907	2,116
	Net	82	98	226	310	377	429	528	645	756	793	824	869	823	785	758
	Dep. Exp.		38	62	82	104	126	95	94	110	195	201	212	211	211	209

note: Incorporates additional converter costs function for added subscribers

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: B) 2% Annual Growth in Penetration Rate
11-Nov-90

DEPRECIATION SCHEDULES

DEPRECIATION SCHEDULES		Depreciation Expense Allocation															
Item	Added Cost	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	
Vehicles	Previous	0	0	0													
	5 yr SL	10	2	2													
	Previous	10	2	2	2												
	Previous	10	2	2	2	2											
	Previous	10	2	2	2	2	2										
	Protoma Adj.	343	69	69	69	69	69										
	Subtotal	373															
	1990	27	6	5	5	5	5										
	1991	13		3	3	3	3	3									
	1992	13			3	3	3	3	3								
	1993	16				3	3	3	3	3							
	1994	17					3	3	3	3	3						
	1995	18						4	4	4	4	4					
	1996	22							4	4	4	4	4				
	1997	23								5	5	5	5	5			
	1998	24									5	5	5	5	5		
	1999	27										5	5	5	5		
	2000	30											6	6	6		
	2001	31												6	6		
	2002	36													6	6	
	2003	38														6	
	2004	40															
	2005	46															
	2006	49															
	2007	51															
	2008	59															
	2009	62															
	2010	62															
	Gross	373	400	413	427	443	460	478	500	522	546	573	602	634	670	708	
	Acc Dep.	197	277	360	443	527	613	629	648	668	688	709	734	760	790	822	
	Net	176	123	54	0	0	0	0	0	0	0	0	0	0	0	0	
	Dep. Exp.		80	83	83	85	86	16	17	19	21	23	25	27	30	32	

SCENARIO C - FINANCIAL PROJECTIONS

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: C) 1% Annual Growth in Penetration Rate & \$2 Increase in 1992 Rates

INCOME STATEMENT (\$000s)

		1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Revenues	Rev Growth %	\$3,092	\$3,069	\$4,464	\$5,026	\$5,427	\$5,870	\$6,355	\$6,879	\$7,445	\$8,061	\$8,707	\$9,418
Operating Expense	Exp Growth %	2,333	2,306	2,489	2,693	2,894	3,116	3,358	3,620	3,904	4,207	4,534	4,889
Operating Income	C.F. %	1,359	1,653	1,976	2,333	2,534	2,755	2,997	3,258	3,541	3,844	4,173	4,529
		36.8%	41.8%	44.3%	46.4%	46.7%	46.9%	47.2%	47.4%	47.6%	47.7%	47.9%	48.1%
Less Other Expenses:													
Interest on Advances from Affiliates		1,582	1,582	1,646	1,721	1,729	1,726	1,704	1,675	1,633	1,575	1,496	1,392
Depreciation & Amortization		1,176	929	1,001	1,041	1,079	1,120	1,038	1,061	1,104	1,217	1,258	1,309
Corporate G&A		93	100	113	127	137	149	161	174	188	204	220	238
Mgt. Fees		<u>258</u>	<u>276</u>	<u>312</u>	<u>351</u>	<u>379</u>	<u>410</u>	<u>444</u>	<u>480</u>	<u>520</u>	<u>562</u>	<u>608</u>	<u>657</u>
Subtotal:		3,109	2,887	3,072	3,240	3,323	3,404	3,346	3,390	3,445	3,558	3,582	3,597
Taxable Income		(1,750)	(1,234)	(1,096)	(907)	(790)	(649)	(350)	(132)	96	286	591	932
Less:													
Income Taxes		<u>(595)</u>	<u>(420)</u>	<u>(373)</u>	<u>(308)</u>	<u>(268)</u>	<u>(221)</u>	<u>(119)</u>	<u>(45)</u>	<u>33</u>	<u>97</u>	<u>201</u>	<u>317</u>
Income Available		(1,155)	(815)	(723)	(599)	(521)	(428)	(231)	(87)	64	189	390	615

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: C) 1% Annual Growth in Penetration Rate & \$2 Increase in 1992 Rates

BALANCE SHEET (\$000s)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
ASSETS												
Current Assets:												
Cash	9	122	137	155	167	181	196	212	229	248	268	290
Accounts Receivable	139	139	145	150	157	163	171	179	188	197	207	218
Allowance for Bad Debts	(45)	(45)	(48)	(48)	(50)	(52)	(55)	(57)	(60)	(63)	(66)	(70)
Other	<u>289</u>	<u>289</u>	<u>300</u>	<u>312</u>	<u>325</u>	<u>339</u>	<u>354</u>	<u>371</u>	<u>390</u>	<u>409</u>	<u>430</u>	<u>452</u>
sub-total	393	506	536	569	599	631	666	706	747	791	839	890
Long Term Assets:												
Gross Plant and Equipment	11,222	11,785	12,098	13,193	13,715	14,209	14,750	15,349	16,000	16,705	17,435	18,267
Gross Deferred Assets	<u>1,603</u>	<u>1,603</u>	<u>1,603</u>	<u>1,603</u>	<u>1,603</u>	<u>1,603</u>	<u>1,603</u>	<u>1,603</u>	<u>1,603</u>	<u>1,603</u>	<u>1,603</u>	<u>1,603</u>
sub-total	12,825	13,388	14,301	14,796	15,318	15,812	16,353	16,953	17,603	18,308	19,038	19,870
Less Accumulated Depreciation & Amortization	2,957	3,886	4,887	5,929	7,007	8,127	9,165	10,226	11,330	12,547	13,805	15,114
Net Plant & Equipment	9,868	9,502	9,414	8,868	8,311	7,685	7,188	6,727	6,273	5,761	5,233	4,757
TOTAL ASSETS	10,261	10,008	9,950	9,436	8,910	8,316	7,855	7,432	7,020	6,562	6,072	5,646
LIABILITIES & OWNERS EQUITY												
Current Liabilities	454	454	470	489	510	532	556	583	612	642	674	709
Advances from Affiliates	13,755	14,315	14,904	15,031	15,005	14,817	14,562	14,199	13,695	13,008	12,106	11,030
Retained Earnings	<u>(3,947)</u>	<u>(4,761)</u>	<u>(5,485)</u>	<u>(6,083)</u>	<u>(6,605)</u>	<u>(7,033)</u>	<u>(7,264)</u>	<u>(7,351)</u>	<u>(7,287)</u>	<u>(7,066)</u>	<u>(6,708)</u>	<u>(6,093)</u>
Total	10,262	10,008	9,950	9,436	8,910	8,316	7,855	7,432	7,020	6,562	6,072	5,646
Difference to Assets	(0)	0	0	0	0	0	0	0	0	(0)	0	0

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: C) 1% Annual Growth in Penetration Rate & \$2 Increase in 1992 Rates

STATEMENT OF CASH FLOW (\$000s)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Net Income	(1,155)	(815)	(723)	(599)	(521)	(428)	(231)	(87)	84	189	390	615
Cash Available from Operations:												
Change in Non-Cash Current Assets	281	0	(14)	(16)	(18)	(19)	(21)	(23)	(24)	(26)	(27)	(29)
Depreciation & Amortization	1,178	929	1,001	1,041	1,079	1,120	1,038	1,061	1,104	1,217	1,258	1,309
Change in Current Liabilities	17	0	17	18	21	22	24	27	29	31	32	34
Cash From Financing:												
Debt From Affiliates	1,839	581	649	67	(26)	(188)	(254)	(363)	(504)	(687)	(902)	(1,075)
Cash From Investing:												
Capital Expenditures	(2,596)	(563)	(913)	(495)	(522)	(483)	(542)	(599)	(650)	(705)	(730)	(832)
Increase in Cash	(457)	113	16	17	12	14	15	18	17	19	20	22
Prior Year Cash	40	9	122	137	155	167	181	198	212	229	248	268
EOY Cash	9	122	137	155	167	181	196	212	229	248	268	290
	0	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	(0)

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: C) 1% Annual Growth in Penetration Rate & \$2 Increase in 1992 Rates

OTHER INFORMATION

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Homes Passed:												
Beginning	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000
Added	0	0	0	0	0	0	0	0	0	0	0	0
Ending	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000
Plant Miles												
Aerial												
Underground												
sub-total	178	178	178	178	178	178	178	178	178	178	178	178
Projected Subscribers												
Beginning	12,062	12,062	12,542	13,022	13,502	13,982	14,462	14,942	15,422	15,902	16,382	16,862
Added	0	480	480	480	480	480	480	480	480	480	480	480
Ending	12,062	12,542	13,022	13,502	13,982	14,462	14,942	15,422	15,902	16,382	16,862	17,342
Average	12,062	12,302	12,782	13,262	13,742	14,222	14,702	15,182	15,662	16,142	16,622	17,102
Penetration	25.1%	26.1%	27.1%	28.1%	29.1%	30.1%	31.1%	32.1%	33.1%	34.1%	35.1%	36.1%
Additional Outlets												
% of Basic	26.4%	26.4%	26.4%	26.4%	26.4%	26.4%	26.4%	26.4%	26.4%	26.4%	26.4%	26.4%
Average	3,188	3,251	3,378	3,505	3,632	3,759	3,886	4,013	4,139	4,266	4,393	4,520
Remote Control												
% of Basic	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%
Average	2,895	2,952	3,008	3,163	3,298	3,413	3,528	3,644	3,759	3,874	3,989	4,104
FM Service												
% of Basic	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Average	60	62	64	66	69	71	74	76	78	81	83	86
Premium Subscribers												
% of Basic	81.4%	81.4%	81.4%	81.4%	81.4%	81.4%	81.4%	81.4%	81.4%	81.4%	81.4%	81.4%
Average	9,823	10,018	10,409	10,800	11,191	11,582	11,973	12,364	12,755	13,146	13,537	13,927
Monthly Subscriber Rates												
Basic	\$14.84	\$15.62	\$17.50	\$19.50	\$20.34	\$21.27	\$22.30	\$23.39	\$24.56	\$25.78	\$27.10	\$28.51
Additional Outlets	\$3.80	\$4.00	\$4.16	\$4.33	\$4.52	\$4.73	\$4.96	\$5.20	\$5.46	\$5.73	\$6.02	\$6.34
Remote Converters	\$3.78	\$3.96	\$4.11	\$4.29	\$4.48	\$4.68	\$4.91	\$5.15	\$5.40	\$5.67	\$5.96	\$6.27
FM Service	\$1.00	\$1.08	\$1.75	\$1.82	\$1.90	\$1.99	\$2.08	\$2.18	\$2.29	\$2.41	\$2.53	\$2.66
Premium Service (Avg)	\$10.01	\$10.54	\$10.95	\$11.42	\$11.92	\$12.46	\$13.06	\$13.70	\$14.39	\$15.11	\$15.88	\$16.70

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: C) 1% Annual Growth in Penetration Rate & \$2 Increase in 1992 Rates

INCOME STATEMENT DETAIL (\$000s)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Revenue:												
Basic	\$2,148	\$2,306	\$2,684	\$3,103	\$3,354	\$3,631	\$3,933	\$4,261	\$4,615	\$4,995	\$5,405	\$5,851
Additional Outlets	145	156	168	182	197	213	231	250	271	293	318	344
Converters Rentals	131	140	151	164	177	192	208	225	244	264	285	309
Premium Service	1,181	1,267	1,368	1,481	1,600	1,732	1,877	2,033	2,202	2,383	2,579	2,791
Installation Misc.	45	45	47	49	51	52	54	56	58	60	61	63
Advertising	26	27	28	29	30	31	32	33	34	35	36	38
Other	8	9	9	9	10	10	10	11	11	11	12	12
Pay Per View	8	8	8	8	9	9	9	10	10	10	10	11
Total	3,692	3,959	4,484	5,026	5,427	5,870	6,355	6,879	7,445	8,051	8,707	9,418
Operating Expense:												
Fixed	188	195	202	211	220	230	241	253	266	279	293	308
Variable												
- Service (Distribution - Aerial)	198	205	213	223	232	243	255	267	280	294	309	326
- Service (Distribution - UG)	0	0	0	0	0	0	0	0	0	0	0	0
- Selling & Marketing	343	363	392	424	458	496	538	582	631	683	739	800
- Satellite Programming	153	161	174	189	204	221	239	259	281	304	329	356
- Microwave Service	0	0	0	1	1	1	1	1	1	1	1	1
- Other Admin	5	5	6	6	7	7	8	8	9	10	11	11
- Gen & Admin	575	609	657	711	768	832	901	976	1,057	1,144	1,238	1,340
- Copyright Fees	25	27	31	36	39	42	46	49	53	58	63	68
- Franchise Fees	170	183	206	232	250	271	293	317	343	371	401	434
- Bad Debt Collection	248	99	112	126	136	147	159	172	186	201	218	235
- HBO Service Expense (SE)	215	231	249	270	292	316	342	370	401	434	470	509
- Showtime SE	109	117	126	137	148	160	173	188	203	220	238	258
- Cinemax SE	32	35	38	41	44	47	51	56	60	65	71	77
- Disney SE	32	35	37	41	44	47	51	56	60	65	71	78
- Movie Channel SE	0	0	0	0	0	0	0	0	0	0	0	0
- Giant Vision SE	3	3	3	4	4	4	4	5	5	6	6	7
- Bravo SE	19	21	22	24	26	28	31	33	36	39	42	46
- Nostalgia SE	1	1	2	2	2	2	2	2	3	3	3	3
- AMC SE	10	11	12	13	14	15	17	18	19	21	23	25
- Pay Per View SE	5	5	5	6	6	7	7	8	8	9	10	11
Total	2,333	2,308	2,489	2,693	2,894	3,116	3,358	3,620	3,904	4,207	4,534	4,889
Operating Income	1,359	1,651	1,995	2,333	2,534	2,755	2,997	3,259	3,541	3,844	4,173	4,529

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: C) 1% Annual Growth in Penetration Rate & \$2 Increase in 1992 Rates

INCOME STATEMENT DETAIL (cont.)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Other Expenses:												
Depreciation and Amortization	1,178	929	1,001	1,041	1,079	1,120	1,038	1,061	1,104	1,217	1,258	1,309
Principle Repayment to Affiliates	(1,839)	(561)	(649)	(67)	26	188	254	363	504	687	902	1,075
Interest on Advances from affiliates	1,682	1,582	1,646	1,721	1,729	1,726	1,704	1,875	1,833	1,675	1,496	1,392
Corporate G&A	83	100	113	127	137	149	161	174	188	204	220	238
Mgt. Fees	258	278	312	351	379	410	444	480	520	562	608	657

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: C) 1% Annual Growth in Penetration Rate & \$2 Increase in 1992 Rates

INPUT SECTION 1

[illegible]

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: C) 1% Annual Growth in Penetration Rate & \$2 Increase in 1992 Rates

OUTPUT SECTION

Net Present Value (Op.Inc.):

- 20 yrs, w/o residual value
- 20 yrs, w/ residual value (@ 10X 2010's Op. Inc.)
- 10 yrs, w/o residual value
- 10 yrs, w/ residual value (@ 10X 1990's Op. Inc.)

Internal Rate of Return

- 10 yrs, w/ residual value (@ 10X 1990's "Net Flow")

Financial Ratios:

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Net Income/Sales:	-31.3%	-20.0%	-16.2%	-11.9%	-9.6%	-7.3%	-3.6%	-1.3%	0.6%	2.3%	4.5%	6.5%
Industry Average=	-13.9%											
Operating Income/Sales:	36.8%	41.8%	44.3%	46.4%	46.7%	46.9%	47.2%	47.4%	47.6%	47.7%	47.9%	48.1%
Industry Average=	49.8%											
Sales/Assets:	36.0%	39.0%	44.9%	53.3%	60.9%	70.6%	80.9%	92.6%	106.1%	122.9%	143.4%	166.8%
Industry Average (calc) =	9.6%											
Net Income/Equity:	29.3%	17.1%	13.2%	9.8%	7.9%	6.1%	3.2%	1.2%	-0.9%	-2.7%	-5.8%	-10.1%
Industry Average (calc) =	4.9%											
Pay Sub./Basic Sub.	89.0%	89.0%										
Industry Average (total industry) =	82.5%	81.0%										
Industry Average (top 100 operators) =	79.8%											
Basic Units/Homes Passed	26.1%											
Industry Average=	69.2%											
Monthly Revenue/Basic Sub	\$25.61	\$16.62	\$17.50	\$19.50	\$20.34	\$21.27	\$22.30	\$23.39	\$24.66	\$25.78	\$27.10	\$28.51
Industry Average=	\$15.95											
Times Interest Earned												
Industry Average=												

Parent Company (Linest) Ratios:

Debt/Equity	-31.1
Industry Average=	3.3
Net Income/Assets	-9.7%
Industry Average=	-1.5%

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: C) 1% Annual Growth in Penetration Rate & \$2 Increase in 1992 Rates

ASSUMPTIONS & CALCULATIONS

BERKLEY SYSTEM:

o 1990 BASIC SUBSCRIBERS:	12,082	
o 1990 PREMIUM SUBSCRIBERS:	9,823	
o 1990 WIEGHTED AVERAGE BASIC SUBSCRIBER RATE:		
$((\$15.95 * 10,759) + (\$29.95 * 13) + (\$12.75 * 1290)) / (10,759 + 13 + 1,290) =$	\$15.62	
o 1990 WIEGHTED AVERAGE PAY SERVICES RATE:		
$((\$10.95 * (4,651 + 2,852)) + (\$9.95 * 896) + (\$7.95 * 858) + (\$10 * 500)) / (4,651 + 2,852 + 896 + 858 + 500) =$	\$10.54	
o TOTAL HOMES PASSED:*	48,000	
o NUMBER OF SUBSCRIBERS WITH ADDITIONAL OUTLETS:	3,188	
o TOTAL PLANT MILES:	178	
o ADDITIONAL CONVERTER CHARGE:	\$64	
o ADDITIONAL DROP CHARGE:	\$90	

* TOTAL HOMES PASSED NUMBER IS BASED UPON CITY POPULATION, AND DIFFERS FROM VALUES SUBMITTED BY THE CITY.

TOTAL BAY CABLEVISION SYSTEM:

o 1990 BASIC SUBSCRIBERS:	39,496	
o INITIAL INSTALLATION CHARGE:	\$30	
o SUBSEQUENT INSTALLATION/VISITATION CHARG	\$25	
o INSTALLATION CHARGE FOR ADDITIONAL OUTLE	\$8	
o MONTHLY CHARGE FOR ADDITIONAL OUTLETS:	\$4	
o TOTAL PLANT MILES:	548	
LENFEST'S COST OF DEBT:	11.50%	

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: C) 1% Annual Growth in Penetration Rate & \$2 Increase in 1982 Rates

ALLOCATION OF 1989 SYSTEM REVENUE TO BERKELEY:

	<u>SYSTEM VALUE</u>	<u>ALLOCATION BASIS TO BERKELEY</u>
- BASIC	\$0,627,982	
- PREMIUM:		
- HBO	\$2,008,543	
- SHOWTIME	\$1,000,718	
- CINEMAX	\$373,972	
- DISNEY	\$240,360	
- MOVIE CHANNEL	\$0	
- GIANT VISION	\$17,375	
SUB-TOTAL	\$3,640,955	
- PAY PER VIEW	\$24,773	\$0.63 PER SUB
- INSTALLATION	\$423,428	
- CONVERTER RENTAL	\$321,849	
- ADVERTISING	\$86,649	\$2.18 PER SUB
- OTHER:		
- LATE CHARGES	\$1,288	
- RENTAL INCOME	\$14,520	
- OTHER	\$11,885	
SUB-TOTAL	\$27,473	\$0.70 PER SUB
TOTAL REVENUE	\$11,163,207	

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: C) 1% Annual Growth in Penetration Rate & \$2 Increase in 1992 Rates

ALLOCATION OF 1989 SYSTEM EXPENSES TO BERKELEY:

	<u>SYSTEM AMOUNT</u>	<u>ALLOCATION BASIS TO BERKELEY</u>
A) FIXED:		
- SERVICE	\$100,000	\$3
- LOCAL ORIGINATION	\$87,219	\$2
- GEN & ADMIN	\$200,000	\$5
SUB-TOTAL	\$387,219	\$10 PER BASIC SUBSCRIBER
B) PER PLANT MILE:		
- SERVICE	\$510,032	\$1,113 PER PLANT MILE
C) PER BASIC SUBSCRIBER:		
- SELLING & MARKETING	\$1,124,182	\$28
- SATELLITE PROGRAMMING	\$499,987	\$13
- MICROWAVE SERVICE	\$1,342	\$0
- OTHER ADMIN.	\$16,008	\$0
- GEN & ADMIN	\$1,884,150	\$45
SUB-TOTAL	\$3,525,667	\$89 PER BASIC SUBSCRIBER
D) PER BASIC REVENUE:		
- COPYRIGHT FEES	\$76,696	1.2% PER BASIC REVENUE DOLLAR
E) PER TOTAL REVENUES:		
- FRANCHISE FEES	\$514,235	4.6%
- CORP. G&A	\$282,193	2.5%
- BAD DEBT COLLECTION	\$750,665	6.7% (note: bad debt expense lowered to 2.5% of revenues for 1990 and on)
- MGT FEES	\$778,580	7.0%
SUB-TOTAL	\$2,325,663	20.9% PER TOTAL REVENUE DOLLAR
F) PER PREMIUM REVENUE:		
- HBO SERVICE EXP (SE)	\$663,437	18.2%
- SHOWTIME SE	\$336,072	9.2%
- CINEMAX SE	\$99,805	2.7%
- DISNEY SE	\$99,812	2.7%
- MOVIE CHANNEL SE	\$0	0.0%
- GIANT VISION SE	\$5,813	0.2%
- BRAVO SE	\$59,349	1.6%
- NOSTAGIA SE	\$4,276	0.1%
- AMC SE	\$32,085	0.9%
SUB-TOTAL	\$1,303,249	35.8% PER PREMIUM REVENUE DOLLAR
G) PER PAY PER VIEW REVENUE:	\$14,817	59.8% PER PAY PER VIEW DOLLAR

EC BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: C) 1% Annual Growth in Penetration Rate & \$2 Increase in 1992 Rates

NET FLOW (\$000):

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Revenues	\$3,692	\$3,959	\$4,464	\$5,026	\$5,427	\$5,870	\$6,355	\$6,879	\$7,445	\$8,051	\$8,707	\$9,418
Operating Expense	<u>2,333</u>	<u>2,306</u>	<u>2,489</u>	<u>2,693</u>	<u>2,894</u>	<u>3,116</u>	<u>3,358</u>	<u>3,620</u>	<u>3,904</u>	<u>4,207</u>	<u>4,534</u>	<u>4,889</u>
Operating Income	1,359	1,653	1,975	2,333	2,534	2,755	2,997	3,258	3,541	3,844	4,173	4,529
Capital Expenditures	<u>2,590</u>	<u>563</u>	<u>913</u>	<u>495</u>	<u>522</u>	<u>493</u>	<u>542</u>	<u>599</u>	<u>650</u>	<u>705</u>	<u>730</u>	<u>832</u>
Net Flow	(1,237)	1,091	1,063	1,838	2,011	2,261	2,455	2,659	2,891	3,139	3,442	3,697

ESTIMATED BERKELEY PORTION OF TOTAL 1989 BAY CABLEVISION SYSTEM'S BALANCE SHEET

	SYSTEM GROSS	SYSTEM DEPRECIATION	SYSTEM NET	BERKLEY GROSS	BERKLEY DEPRECIATION	BERKLEY NET	% OF TOTAL	ALLOCATION BASIS
LONG TERM ASSETS								
LAND & BUILDINGS	\$844,323	\$909	\$843,414	\$209,287	\$295	\$208,992	32.5%	PER PLANT MILE
DROPS	\$3,732	\$0	\$3,732	\$1,140	\$0	\$1,140	30.5%	PER BASIC SUB.
OFFICE EQUIP & FIXTURES/CONFI	\$178,780	\$75,574	\$103,206	\$54,599	\$23,040	\$31,519	30.5%	PER BASIC SUB.
HEADEND	\$1,457,549	\$594,517	\$863,032	\$445,133	\$181,584	\$263,568	30.5%	PER BASIC SUB.
VECHILES & EQUIPMENT	\$1,221,742	\$844,718	\$577,024	\$373,118	\$196,898	\$176,222	30.5%	PER BASIC SUB.
CONVERTERS	\$818,487	\$547,159	\$269,308	\$249,347	\$167,101	\$82,246	30.5%	PER BASIC SUB.
DISTRIBUTION	\$30,448,589	\$7,353,585	\$23,095,004	\$9,890,235	\$2,388,573	\$7,501,662	32.5%	PER PLANT MILE
Sub-Total:	\$34,771,182	\$9,218,462	\$25,552,720	\$11,222,869	\$2,957,510	\$8,265,349	30.5%	PER BASIC SUB.
DEFERRED ASSETS	\$5,249,875	\$0	\$5,249,875	\$1,603,301	\$0	\$1,603,301		
Sub-Total:	\$40,021,057	\$9,218,462	\$30,802,595	\$12,826,170	\$2,957,510	\$9,868,660		
CURRENT ASSETS								
CASH	\$29,517	\$0	\$29,517	\$9,014	\$0	\$9,014	30.5%	PER SUB
ACCOUNTS RECIEVABLE	\$456,326	\$0	\$456,326	\$139,381	\$0	\$139,381	30.5%	PER SUB
ALLOWANCE FOR BAD DEBTS	(\$148,000)	\$0	(\$148,000)	(\$44,588)	\$0	(\$44,588)	30.5%	PER SUB
OTHER	\$948,714	\$0	\$948,714	\$289,125	\$0	\$289,125	30.5%	PER SUB
Sub-Total:	\$1,286,557	\$0	\$1,286,557	\$392,912	\$0	\$392,912		
Total Assets:	\$41,307,614	\$9,218,462	\$32,089,152	\$13,219,072	\$2,957,510	\$10,261,562		
LIABILITIES & EQUITY								
CURRENT LIABILITIES	\$1,418,800	NA	\$1,418,800	\$453,899	NA	\$453,899	32.0%	PER BERKELEY ASSETS/
ADVANCES FROM AFFILIATES	\$43,014,975	NA	\$43,014,975	\$13,754,597	NA	\$13,754,597	32.0%	SYSTEM ASSETS RATIO
RETAINED EARNINGS	(\$12,342,886)	NA	(\$12,342,886)	(\$3,946,734)	NA	(\$3,946,734)	32.0%	
Total Liabilities and Equity:			\$32,089,149		NA	\$10,261,561		

BERKELEY CABLE SYSTEM

FINANCIAL PROJECTION MODEL

Scenario: C) 1% Annual Growth in Penetration Rate & \$2 Increase in 1992 Rates
11-Nov-90

DEPRECIATION SCHEDULES

Item	Added Cost	Depreciation Expense Allocation														
		1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Headend	Previous 302		20	20	20	20	20	20	20	20	20	20	20	20		
15 yr SL	Previous 15		1	1	1	1	1	1	1	1	1	1	1	1		
	Previous 14		1	1	1	1	1	1	1	1	1	1	1	1	1	
	Previous 10		1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Profoma Adj. 98		7	7	7	7	7	7	7	7	7	7	7	7	7	7
	Subtotal 445															
	1990 7		0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1991 20			1	1	1	1	1	1	1	1	1	1	1	1	1
	1992 22				1	1	1	1	1	1	1	1	1	1	1	1
	1993 25					2	2	2	2	2	2	2	2	2	2	2
	1994 27						2	2	2	2	2	2	2	2	2	2
	1995 30							2	2	2	2	2	2	2	2	2
	1996 32								2	2	2	2	2	2	2	2
	1997 35									2	2	2	2	2	2	2
	1998 39										3	3	3	3	3	3
	1999 40											3	3	3	3	3
	2000 48												3	3	3	3
	2001 50													3	3	3
	2002 55														4	4
	2003 59															4
	2004 64															
	2005 70															
	2006 75															
	2007 82															
	2008 88															
	2009 95															
	2010 98															
	Gross	445	452	473	495	520	547	576	609	644	683	723	769	819	873	933
	Acc Dep.	182	212	243	276	311	347	386	426	469	515	563	614	669	705	746
	Net	264	240	229	219	209	199	190	182	175	168	160	155	150	168	187
	Dep. Exp.		30	32	33	35	36	38	41	43	46	48	51	55	37	40

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: C) 1% Annual Growth in Penetration Rate & \$2 Increase in 1992 Rates
11-Nov-90

DEPRECIATION SCHEDULES

Item	Added Cost	Depreciation Expense Allocation														
		1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Distribution	Previous	3,635	242	242	242	242	242	242	242	242	242	242	242	242		
	15 yr SL	196	13	13	13	13	13	13	13	13	13	13	13	13		
	Previous	444	30	30	30	30	30	30	30	30	30	30	30	30	30	
	Previous	467	31	31	31	31	31	31	31	31	31	31	31	31	31	31
	Proforma Adj.	5,148	343	343	343	343	343	343	343	343	343	343	343	343	343	343
	Subtotal	9,890														
	1990	380	25	25	25	25	25	25	25	25	25	25	25	25	25	25
	1991	656		37	37	37	37	37	37	37	37	37	37	37	37	37
	1992	178			12	12	12	12	12	12	12	12	12	12	12	12
	1993	195				13	13	13	13	13	13	13	13	13	13	13
	1994	150					10	10	10	10	10	10	10	10	10	10
	1995	166						11	11	11	11	11	11	11	11	11
	1996	185							12	12	12	12	12	12	12	12
	1997	205								14	14	14	14	14	14	14
	1998	227									15	15	15	15	15	15
	1999	239										16	16	16	16	16
	2000	278											19	19	19	19
	2001	308												20	20	20
	2002	337													22	22
	2003	369														25
	2004	404														
	2005	441														
	2006	481														
	2007	524														
	2008	571														
	2009	621														
	2010	642														
	Gross	9,890	10,270	10,826	11,004	11,198	11,348	11,513	11,698	11,903	12,131	12,370	12,648	12,954	13,290	13,660
	Acc Dep.	2,389	3,073	3,794	4,528	5,274	6,030	6,797	7,577	8,370	9,178	10,003	10,845	11,709	12,339	12,965
	Net	7,501	7,197	7,032	6,476	5,924	5,318	4,716	4,121	3,533	2,952	2,367	1,802	1,245	851	695
	Dep. Exp.		684	721	733	746	758	767	780	793	808	824	843	863	881	896

note: Incorporates additional costs function for added aerial and underground miles

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: C) 1% Annual Growth in Penetration Rate & \$2 Increase in 1992 Rates
11-Nov-90

DEPRECIATION SCHEDULES

Item	Added Cost	Depreciation Expense Allocation														
		1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Drops	Previous	1354	90	90	90	90	90	90	90	90	90	90	90	90		
15 yr SL	Previous	17	1	1	1	1	1	1	1	1	1	1	1	1		
	Previous	38	3	3	3	3	3	3	3	3	3	3	3	3		
	Previous	42	3	3	3	3	3	3	3	3	3	3	3	3		
	Profoma Adj.	(1,450)	-97	-97	-97	-97	-97	-97	-97	-97	-97	-97	-97	-97		
	Subtotal	1														
	1990	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1991	86		6	6	6	6	6	6	6	6	6	6	6	6	6
	1992	59			4	4	4	4	4	4	4	4	4	4	4	4
	1993	54				4	4	4	4	4	4	4	4	4	4	4
	1994	51					3	3	3	3	3	3	3	3	3	3
	1995	55						4	4	4	4	4	4	4	4	4
	1996	59							4	4	4	4	4	4	4	4
	1997	63								4	4	4	4	4	4	4
	1998	68									5	5	5	5	5	5
	1999	70										5	5	5	5	5
	2000	79											5	5	5	5
	2001	35													2	2
	2002	38														2
	2003	42														
	2004	46														
	2005	51														
	2006	55														
	2007	61														
	2008	66														
	2009	72														
	2010	75														
	Gross	1	1	87	146	200	251	306	365	429	497	566	645	680	718	760
	Acc Dep.	0	0	6	16	29	46	66	91	119	152	190	233	278	326	377
	Net	1	1	81	131	171	206	240	275	310	345	376	412	401	392	383
	Dep. Exp.		0	6	10	13	17	20	24	29	33	38	43	45	48	51

note: Incorporates additional drop costs function for added subscribers

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: C) 1% Annual Growth in Penetration Rate & \$2 Increase in 1992 Rates
11-Nov-90

DEPRECIATION SCHEDULES

Item	Added Cost	Depreciation Expense Allocation												2001	2002	2003
		1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000			
Fixtures,	Previous	0	0	0	0	0	0	0	0	0	0	0	0	0		
Furniture, &	Previous	10	1	1	1	1	1	1	1	1	1	1	1	1	1	
Office Equip	Previous	11	1	1	1	1	1	1	1	1	1	1	1	1	1	1
15 yr SL	Previous	12	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Protoma Adj.	22	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Subtotal	55														
	1990	82	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	1991	15		1	1	1	1	1	1	1	1	1	1	1	1	1
	1992	17			1	1	1	1	1	1	1	1	1	1	1	1
	1993	19				0	0	0	0	0	0	0	0	0	0	0
	1994	21					1	1	1	1	1	1	1	1	1	1
	1995	23						2	2	2	2	2	2	2	2	2
	1996	26							2	2	2	2	2	2	2	2
	1997	28								2	2	2	2	2	2	2
	1998	31									2	2	2	2	2	2
	1999	33										2	2	2	2	2
	2000	38											3	3	3	3
	2001	42												3	3	3
	2002	48														3
	2003	50														
	2004	54														
	2005	59														
	2006	64														
	2007	70														
	2008	76														
	2009	82														
	2010	85														
	Gross	55	137	152	169	187	208	231	257	285	318	349	387	428	474	524
	Acc Dep.	23	32	42	54	65	78	93	108	128	148	170	195	223	253	286
	Net	32	104	109	115	122	130	138	148	158	169	179	192	205	221	238
	Dep. Exp.		9	10	11	12	13	15	16	18	20	22	25	28	30	33

BERKELEY CABLE SYSTEM

FINANCIAL PROJECTION MODEL

Scenario: C) 1% Annual Growth in Penetration Rate & \$2 Increase in 1992 Rates
11-Nov-90

DEPRECIATION SCHEDULES

Item		Added	Depreciation Expense Allocation														
		Cost	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Contingencies	Previous	0		0	0	0	0	0	0	0	0	0	0	0			
	Previous	0		0	0	0	0	0	0	0	0	0	0	0			
	Previous	0		0	0	0	0	0	0	0	0	0	0	0	0	0	
	Previous	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Subtotal	0															
	1990	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1991	67			4	4	4	4	4	4	4	4	4	4	4	4	4
	1992	73				5	5	5	5	5	5	5	5	5	5	5	5
	1993	80					0	0	0	0	0	0	0	0	0	0	0
	1994	87						6	6	6	6	6	6	6	6	6	6
	1995	96							6	6	6	6	6	6	6	6	6
	1996	106								7	7	7	7	7	7	7	7
	1997	117									8	8	8	8	8	8	8
	1998	129										9	9	9	9	9	9
	1999	135											9	9	9	9	9
	2000	156												10	10	10	10
	2001	171													11	11	11
	2002	187														12	12
	2003	205															14
	2004	223															
	2005	243															
	2006	264															
	2007	287															
	2008	311															
	2009	338															
	2010	348															
	Gross		0	0	67	140	220	307	403	509	627	756	891	1,047	1,219	1,406	1,611
	Acc Dep.			0	4	14	24	39	61	90	127	173	227	292	369	458	560
	Net		67	0	62	126	196	267	342	419	500	583	664	755	850	949	1,051
	Dep. Exp.			0	4	9	10	16	22	29	37	46	55	65	76	89	103

note: Contingencies' 1989 accumulated depreciation is included in office equipment due to nature of actual depreciation supplied by Bay Cablevision. Accordingly, pre 1990 costs & depreciation are included in the Office Equipment schedule.

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: C) 1% Annual Growth in Penetration Rate & \$2 Increase in 1992 Rates
11-Nov-90

DEPRECIATION SCHEDULES

DEPRECIATION SCHEDULES		Depreciation Expense Allocation															
Item	Added Cost	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	
Converters	Previous	261	33	33	33	33	33										
	Previous	182	23	23	23	23	23										
8 yr SL	Previous	218	27	27	27	27	27	27									
	Previous	90	11	11	11	11	11	11	11								
	Proforma Adj.	(502)	-63	-63	-63	-63	-63	-63	-63	-63							
	Subtotal	249															
	1990	54	7	7	7	7	7	7	7	7							
	1991	156		19	19	19	19	19	19	19	19						
	1992	132			17	17	17	17	17	17	17	17					
	1993	134				17	17	17	17	17	17	17	17				
	1994	141					18	18	18	18	18	18	18	18			
	1995	154						19	19	19	19	19	19	19	19	21	
	1996	169							21	21	21	21	21	21	21	22	
	1997	178								22	22	22	22	22	22	23	
	1998	187									23	23	23	23	23	23	
	1999	187										23	23	23	23	23	
	2000	207											26	26	26	26	
	2001	184												21	21	21	
	2002	173													22	22	
	2003	182														23	
	2004	191															
	2005	201															
	2006	211															
	2007	221															
	2008	233															
	2009	245															
	2010	245															
	Gross	249	303	459	592	726	867	1,020	1,190	1,368	1,554	1,741	1,948	2,112	2,285	2,467	
	Acc Dep.	187	205	262	336	427	535	608	674	751	807	1,067	1,237	1,410	1,587	1,768	
	Net	82	98	197	255	299	331	413	516	617	647	674	711	702	697	698	
	Dep. Exp.		38	57	74	91	108	122	140	157	175	193	210	228	245	262	

note: Incorporates additional converter costs function for added subscribers

BERKELEY CABLE SYSTEM

FINANCIAL PROJECTION MODEL

Scenario: C) 1% Annual Growth in Penetration Rate & \$2 Increase in 1992 Rates
11-Nov-90

DEPRECIATION SCHEDULES

Item	Added Cost	Depreciation Expense Allocation														
		1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Vehicles	Previous	0	0	0												
5 yr 8L	Previous	10	2	2												
	Previous	10	2	2	2											
	Previous	10	2	2	2	2										
	Previous	10	2	2	2	2	2									
	Proforma Adj.	343	60	60	60	60	60									
	Subtotal	373														
	1990	27	5	5	5	5	5									
	1991	13		3	3	3	3	3								
	1992	13			3	3	3	3	3							
	1993	16				3	3	3	3	3						
	1994	17					3	3	3	3	3					
	1995	18						4	4	4	4	4				
	1996	22							4	4	4	4	4			
	1997	23								5	5	5	5	5		
	1998	24									5	5	5	5	5	
	1999	27										5	5	5	5	5
	2000	30											6	6	6	6
	2001	31												6	6	6
	2002	36													7	7
	2003	38														8
	2004	40														
	2005	46														
	2006	49														
	2007	51														
	2008	59														
	2009	62														
	2010	62														
	Gross	373	400	413	427	443	460	478	500	522	546	573	602	634	670	708
	Acc Dep.	197	277	300	443	527	613	629	646	666	686	709	734	760	790	822
	Net	176	123	54	0	0	0	0	0	0	0	0	0	0	0	0
	Dep. Exp.		80	83	83	85	86	16	17	19	21	23	25	27	30	32

BERKELEY CABLE SYSTEM FINANCIAL PROJECTION MODEL

Scenario: C) 1% Annual Growth in Penetration Rate & \$2 Increase in 1992 Rates
11-Nov-90

DEPRECIATION SCHEDULES

DEPRECIATION SCHEDULES		Depreciation Expense Allocation														
Item	Added Cost	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Other																
Other Deferred Assets Gross Cost		1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603
Building Gross Cost		209.0	221.5	221.5	221.5	221.5	221.5	221.5	221.5	221.5	221.5	221.5	221.5	221.5	221.5	221.5
Building Depreciation		0.0	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
Deferred Asset Amortization		80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
Accumulated Building Dep.		0	7	15	22	30	37	44	52	59	66	74	81	89	96	103
Accumulated Amortization		0	80	160	240	321	401	481	561	641	721	802	882	962	1,042	1,122
Summary																
Gross PP&E Costs		11,222	11,785	12,008	13,193	13,715	14,209	14,750	15,349	16,000	16,705	17,435	18,267	19,066	19,938	20,883
Other Deferred Assets Gross Cost		1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603
Change in Gross			563	913	495	522	493	542	599	650	705	730	832	799	872	945
Acc. Dep. - PP&E		2,957	3,806	4,727	5,688	6,686	7,728	8,684	9,665	10,688	11,826	13,003	14,232	15,507	16,856	17,628
Depreciation Expense - PP&E		1,176	849	921	901	998	1,040	958	981	1,024	1,137	1,178	1,229	1,275	1,049	1,072
Acc. Dep & Amort		2,957	3,686	4,687	5,929	7,007	8,127	9,165	10,226	11,330	12,547	13,805	15,114	16,469	17,598	18,750
Gross Costs		12,826	13,388	14,301	14,798	15,318	15,812	16,353	16,953	17,603	18,308	19,038	19,870	20,670	21,541	22,486

April 6, 1990

Sean Gordon
Senior Management Analyst
City of Berkeley
2180 Milvia St.
Berkeley, CA 94704

Dear Sean:

Pursuant to your request, we are providing you with an analysis of the recently proposed National Cable Television Association (NCTA) customer service standards. Our analysis focuses on how the NCTA standards compare with those standards previously discussed by us in our Customer Service Appraisal and Recommendations Report submitted to the City on November 30, 1989.

Our analysis begins with a review of the specific provisions of the NCTA recommendations. Enclosed at the rear of this letter, is a statement of Mr. James Mooney, President and Chief Executive Officer of the NCTA. This statement was presented by Mr. Mooney before the House Subcommittee on Telecommunications and Finance, a subcommittee of the U.S. House of Representatives Committee on Energy and Commerce, on March 1, 1990. On pages 11 - 15, Mr. Mooney reviews the specific standards. Please take a moment to look through these pages.

In general, I think the NCTA standards are a step in the right direction. Although voluntary, they represent a sign by the industry that it is willing to be accountable to their subscribers. Mr. Mooney even states on page 12 of his statement that "cities and states have the authority to enforce them [the standards] by writing them into franchise agreements and local ordinances." Mr. Mooney in fact, encourages them to do so. However, only those standards that are specific should be considered. The attached chart compares the NCTA standards to those discussed in our previous report.

I hope this analysis, as succinct as it is, will be helpful in considering language for the City's cable television ordinance and upcoming franchise renewal. Wally Siembab can answer any questions you might have when he visits Berkeley this week.

Yours truly,

John Risk
President

Enclosure

CHART I

CSC REPORT	NCTA STANDARD	DIFFERENCE
Respond to and resolve customer service calls within a 24 hour time period 7 days a week. Minor problems not affecting all channels may be resolved within 48 hours.	Respond within 24 hours for situations for all problems except those beyond the company's control. Others, within 36 hours, regardless of day of week.	NCTA better
Four hour scheduling window for repair	Morning, afternoon, or all day during normal business hours	Same
Credit offered to subscribers for outages over 24 hours.	Not addressed	
Telephone response time with live company representative within one minute.	Within 30 seconds Fewer than four rings for systems with auto cue devices Busy signals less than 3% of the time.	NCTA better
Office contact hours for billing and installation at a minimum of 8 hours a day M-F and 4 hours on Saturday.	Normal business hours Monday - Friday. Additionally, based on community needs, staff telephones for supplemental hours weekdays and or weekends	CSC better
Complaint and problem calls handled 60 hours a week	Not addressed	
24 hour emergency repairs including weekends and holidays	Not addressed	
Telephone answering capability 24 hours a day providing at least emergency referral information	Supplemental hours based on community needs. Number not addressed.	CSC better

CHART I CONTINUED

CSC REPORT	NCTA STANDARD	DIFFERENCE
Provide all subscribers with information on all services and fees of the company.	Provide written information at time of installation and at anytime upon request of in these areas: products and prices; service options; installation and service policies; and how to use the cable service	Same
A/B switch information distribution to all subscribers	Not specifically addressed	
Privacy information distribution stating possible uses by the cable company of subscribers' names and addresses.	Not specifically addressed	
Provide information on company identification including telephone numbers and address.	Not specifically addressed	
Provide information on parental control devices.	Not specifically addressed	
Non-discrimination on fees so that no subscriber is paying more for service than is listed by the company.	Not specifically addressed	
Notice to City prior to rate increases	30 day notice	NCTA is specific and includes notice channel changes
Three day right to rescind installation order	Not specifically addressed	
Photo identification on all personnel and subcontractors out in field.	Not specifically addressed	

CHART I CONTINUED

CSC REPORT	NCTA STANDARD	DIFFERENCE
Written notice prior to entry of residence	Not specifically addressed	
Written notice by company to customers before disconnecting service	Not specifically addressed	
Removal of equipment by company upon service termination	Not Addressed	
Customer telephone calls to company must cost no more than local calls	Not Addressed	

TECHNICAL INSPECTION
OF
BAY CABLE OF BERKELEY, CALIFORNIA
1989

* * * * *
Communications Support Corp.
Report 89016.001

Submitted to:

THE CITY OF BERKELEY, CALIFORNIA

03 December 1989

by:

Jonathan L. Kramer, VP/Technology
Communications Support Corporation

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TECHNICAL INSPECTION OF
BAY CABLE OF BERKELEY, CALIFORNIA
1989

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TECHNICAL INSPECTION OF
BAY CABLE OF BERKELEY, CALIFORNIA
1989

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LIST OF TABLES AND ATTACHMENTS

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ATTACHMENTS

<u>Attachment</u>	<u>Description</u>	<u>Page</u>
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TECHNICAL INSPECTION OF
BAY CABLE OF BERKELEY, CALIFORNIA
1989

1.00 INTRODUCTION

At the direction of the City of Berkeley, California ("City") in connection with its franchise with Bay Cable ("Grantee"), the City has employed Communications Support Corp. ("Consultant") to monitor and evaluate the results of system performance testing conducted by the Grantee.

This report documents the conditions of the system at fifteen (15) subscriber test point locations representing all portions of the Grantee's plant. Additionally, this report documents the findings of a 48 mile "drive-out" of a representative portion of the Grantee's plant.

The tests documented in this report was conducted between 28 August 1989 and 31 August 1989, and was observed in its entirety by Jonathan L. Kramer, the Consultant, representing the City. Mr. Dennis Jones, the Grantee's Plant Manager represented the Grantee throughout all testing phases, and he and his staff performed the tests documented herein.

1.10 SCOPE OF INSPECTION

The scope of our evaluation of the Grantee's system consisted of the inspections listed below:

Signal Quality Elements;

Minimum Video Signal Levels

Picture Distortions

Outside Plant Construction Issues;

Construction Techniques

CPUC General Orders 95 and 128

Picture Quality Elements;

Picture Distortions

Verification of Objective Measurements

Evaluation of Headend Systems;

Review of Headend Systems Performance

Signal quality elements, comprised of minimum video signal levels and picture element distortions, portray the true condition of the cable television system, and highlight any current and/or developing technical problems in the outside plant.

The physical evaluation of a cable television system plant illuminates any construction and/or maintenance problems which may negatively impact subscriber's picture quality in the future.

The California Public Utilities Commission ("CPUC") regulates basic overhead and underground construction techniques. General Order 95 provides the basis for overhead line construction and minimum separations between different services (i.e., power, telephone, fire circuits, and cable). General Order 128 addresses underground cable construction and separation issues. During our evaluation of the Grantee's plant, we inspected the construction for any evidence of violations of this type.

Subjective evaluation of the picture quality by trained observers was used to confirm the objective signal quality observations and measurements, and to document any other picture distortions which might not have been detected by the objective measurements.

Prior to investigating the field plant, we inspected the headend to establish the picture and signal quality elements used to objectively and subjectively quantify the level degradation introduced by the amplification equipment in the outside plant.

2.00 TEST EQUIPMENT USED

The following items of industry-standard electronic test equipment was used to monitor the operation of the outside cable system and levels;

- o Calan System Analyzer, Model 1776
- o Comsonics Window Signal Level Meter
- o Sniffer Signal Leakage Detector
- o Television Test Set
- o Calibrated 100' Test Drop Cable

The items of electronic equipment listed above were provided by the Grantee. Current calibration for the frequency and/or voltage measuring equipment has been assured by the Grantee.

3.00 METHOD

An abbreviated proof of performance test was conducted at the Grantee's headend and at each field test point by the Grantee under our supervision to determine compliance with 47 CFR 76 Subpart K of Federal Communications Commission technical guidelines.

Signal levels were inspected at the headend to establish a control baseline, and picture elements on all activated channels were noted for comparison with field pictures to be inspected.

In the field, signal levels, carrier-to-noise, sweep response, composite triple beat, low frequency distortions were recorded and analyzed, and picture quality was observed and subjectively rated on the industry-accepted 6 step TASO scale.

To simulate the effects of a standard subscriber drop, a 100' length of drop cable was used to connect the output of the subscriber network signal taps to the input of the measuring equipment.

To insure accuracy and validate measurements and inspections, at each test point, the Grantee and Consultant reviewed the signal levels and picture quality ratings which are recorded in this report. If the Grantee's representatives present during the tests disagreed with the measurement as called out by the Consultant, the measurement discrepancy was discussed and resolved. No challenges were raised by the Grantee during the field inspection phase of our inspection.

4.00 OBSERVATIONS AND RESULTS

This following sections detail our headend and system inspection findings.

4.10 HEADEND

We subjectively rated the physical condition of the headend, satellite antennae, and tower structure as being "average". Some physical deterioration on antennae and structures was noted (see, especially, photographs 892009 and 892015).

Several physical construction discrepancies were noted at the headend. Several of the connectors at the satellite antennae were only hand-tight (see photograph 892017).

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No ground connection for the tower exists (Reference: NEC Article 810-15, "Masts and metal structures supporting antennas shall be grounded in accordance with Section 810-21"). Also, the coaxial cable used to connect the antennae to the headend equipment is a high-loss cable. Comment: It is the intention of the Grantee to increase the tower height (and the antenna height) in an attempt to improve off-air pictures received from Sutro Peak. The Grantee anticipates providing a proper ground for the tower, and upgrading the coax at that time. See photographs 892015 and 892016.

We subjectively rated the quality of the television channels leaving the headend for consumption by the subscribers as fair or better on all channels except as noted in the following table:

TABLE 4.10-1

SUBSCRIBER NETWORK DISCREPANCIES AT HEADEND

Channel 02:	SNOWY (NOISY), BEATS (LINES)
Channel 05:	SNOWY (NOISY)
Channel 06:	SNOWY (NOISY), BEATS (LINES)
Channel 19:	SNOWY (NOISY)
Channel 32:	LOW AURAL DEVIATION
Channel 34:	BEATS (LINES)
Channel 35:	BEATS (LINES)
Channel 43:	BEATS (LINES)
Channel 44:	BEATS (LINES)
Channel 45:	BEATS (LINES)
Channel 47:	BEATS (LINES)

The majority of off-air San Francisco channels experience what appears to be a degraded signal-to-noise relationship, hence, the need for the Grantee's plan to increase the tower and antennae height.

4.20 SUBSCRIBER NETWORK

Above-ground Network

The above-ground network is constructed on utility (telephone and power) poles. The majority of the plant (greater than 97%) is constructed using this technique.

Generally, we judged the condition of the above-ground network to be fair to good. One significant exception to this is the Grantee's use ofunjacketed cable in portions of the City for area distribution purposes. Unjacketed cable has no outer plastic jacket to protect the soft aluminum shield from the deteriorating effects of pollution and fine mist salt spray from the bay.

We noted a large number of CPUC General Order 95 overhead line construction violations during our inspection. This is discussed in detail, below.

During the field tests, we visited a total of 13 above-ground test point locations (87% of the total test points visited).

Underground Network

The underground network is constructed in PVC conduits which are buried in trenches between vault locations. The signal taps which serve subscribers are located inside the vaults. Only a small minority of the plant (less than 3%) is constructed using this technique.

Generally, we subjectively judged the condition of the underground network to be only fair. One significant exception to this is the Grantee's use ofunjacketed cable in portions of the City for area distribution purposes. Un-

jacketed cable has no outer plastic jacket to protect the soft aluminum shield from the deteriorating effects of pollution and fine mist salt spray from the bay.

We noted no CPUC General Order 128 underground line construction violations during our inspection.

During the field tests, we visited a total of 2 underground test point locations (13% of the total test points visited).

1989 Field Inspection Test Points

The following table, Table 4.30-2, lists selected franchise technical specifications contained in 47 CFR 76 Subpart K ("the FCC rules"):

TABLE 4.20-1

FCC TECHNICAL SPECIFICATIONS

Low Frequency Distortion:	5% or less
Peak-to-Valley:	12 dB or less
Carrier-to-Noise:	36 dB or more
Composite Triple Beat:	-46 dB or less
Minimum Video Level:	0 dBmV or more

Table 4.20-2, below, highlights the summation results at each of the 15 subscriber network test points:

TABLE 4.20-2

SUMMARY OF SUBSCRIBER NETWORK SUMMATION MEASUREMENTS

Test Point Number	Low Freq. Dist.	Peak to Valley	Hi/Lo Delta Diff.	Carrier to Noise	Comp Triple Beat	Ch.s < 0 dBmV	Notes
01	5.1	6.1	7.0	35.6	-53.2	0	1,2
02	1.2	8.5	4.5	40.5	-54.1	0	
03	2.4	8.5	7.5	43.9	-53.6	0	
04	2.3	5.3	8.0	38.7	-59.9	0	
05	0.7	7.6	9.5	44.7	-59.0	0	
06	0.5	10.7	7.5	46.9	-62.2	0	3
07	0.7	9.8	9.0	45.9	-60.2	0	4
08	0.7	7.0	4.5	48.8	-61.5	0	
09	0.5	7.2	6.5	47.5	-67.5	0	
10	0.5	4.8	4.5	47.2	-59.7	0	
11	0.5	5.7	6.0	48.4	-68.3	0	
12	0.8	9.3	12.0	47.1	-54.8	0	
13	0.5	9.0	7.5	47.6	-61.7	0	
14	0.4	12.3	9.0	45.7	-63.4	7	
15	0.6	6.5	4.5	47.3	-60.1	0	
Average	1.16	7.89	7.16	45.1	-59.95		

Notes:

- 1 Low frequency distortion greater than 5%; FCC violation
- 2 Carrier to noise below 36.0 dB; FCC violation
- 3 Adjacent carriers greater than 3dB delta; Channels S to T > 3 db
- 4 Adjacent carriers greater than 3dB delta; Channels BB to CC > 3 db

Specific test point location reports are listed in an attachment to this report.

4.21 PICTURE ELEMENTS EVALUATION

During the course of the field inspection, we evaluated the pictures on each channel seen at each test point. This is a subjective summation of all of the individual technical (objective) parameters.

To make this subjective analysis in a meaningful manner, the Grantee's representatives and the Consultant jointly viewed each channel at each test point through a standard subscriber converter on a test television set provided by the Grantee. The Consultant made the initial judgment on any picture discrepancy and asked that the Grantee's representatives agree or disagree with the finding(s).

The following table lists each channel by test point, and provides a graphic summation of the picture quality inspection. Where a picture element notation has been made on the following chart, both the Grantee and Consultant have agreed on the accuracy of the individual channel analysis.

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TABLE 4.21-1
PICTURE QUALITY BY CHANNEL AND TEST POINT

	CHANNEL NUMBERS																										
TP#	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	
TP1		B		B	B		B		B	B	B			B	B	B	B		B		B	BN		BN	BN		
TP2																											
TP3	G		G	G																							
TP4	B							N																	N	N	
TP5																											
TP6					B																						
TP7	B			G																							
TP8	B	N		B	B										P									N			
TP9	B				B	N		GP							P											B	
TP10	B							P							P											N	
TP11	B														P												
TP12	BN			B	B	B	B			B	B	B										B	B		B		
TP13	B			B						N					P												
TP14	B																										
TP15				B	B			NP			B															B	

	CHANNEL NUMBERS																											
TP#	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52			
TP1					B										B	BN		BN	B		B	B						
TP2		NS								N													N					
TP3		NS														N												
TP4		N								BN	N		N	NB				B				N						
TP5					B					N			N					N										
TP6										N	SH		N	N	N													
TP7		N								N	N		N		N			B				N						
TP8		N							N	N		N	N	N	N													
TP9		N											N	B	N													
TP10		P	N												N			B										
TP11													N		N	B	N	B			B	N	B		B			
TP12		B	B		B		B	B	B	B	B	B	B		B	B	B	B	B	B	B	B	B		B			
TP13		PG									N		NG	N									N					
TP14										N			N				N	BN					BN					
TP15													N	N	N								B					

This chart is useful in two ways. When reading across, individual test points with a large number of picture element discrepancies (i.e., test points 1 and 12) highlight site (or area) specific problems. When read down in column

order, problems specific to channels on a system-wide basis are highlighted (i.e., channels 2, 5, 6, 16, 29, 37, 38, 39, 40, 42, 43, and 45).

Subjective commentary will be provided in Section 5, below, on the picture analysis.

4.30 CPUC GENERAL ORDER 95 VIOLATIONS

Throughout the field investigation of the Grantee's, we noted a large number of violations of the California Public Utilities Commission General Order 95 (which regulates overhead line construction in the state). It is important to note that large numbers of G095 violations exist in the Pacific Bell and Pacific Gas and Electric overhead plant, as well, but our focus is on the Grantee's plant.

The bulk of the violations deal with cable drops (the cables which connect the subscriber's set to the tap on the pole). The CPUC requirement is that 12' from the curb (or edge of drivable surface) into the roadway, the cable height will be no less than 18'. At the curb (or edge of drivable surface), the cable height will be no less than 16'. These minimum heights are regularly violated throughout the Grantee's plant. A listing of a dozen sample locations is attached to this report.

4.40 SIGNAL LEAKAGE

During the 48 mile drive-out of the plant, and during the electrical evaluation, we monitored the Grantee's signal leakage detectors to determine if leakage was an issue in Berkeley.

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Although several areas of significant signal leakage were found (see list, attached), widespread leakage was not observed. Signal leakage did, however, cause a large number of picture element discrepancies at Test Point 12 (See correction report submitted by Bay Cablevision, attached hereto).

5.00 CONSULTANT'S COMMENTS AND RECOMMENDATIONS

This section contains our subjective analysis of the operation of the system, as well as our recommendations.

5.10 CONSULTANT'S COMMENTS - SUBSCRIBER NETWORK

Picture Quality

The Consultant feels that the majority of the Grantee's subscribers would accept the picture quality at all but 3 of the test points (specifically, test points 1, 4, and 12).

During the inspection, a problem was observed impacting channels 37, 40, 41, 42, and to a lesser degree, channel 31. These channels are generated at Grizzly Peak, and trunked via a dedicated cable to the Berkeley headend. At the Berkeley headend, the Grizzly Peak channels are combined with the Berkeley channels and sent to subscribers. The Grizzly Peak channels suffered from excessive noise (seen as snow in the pictures) intermittently during the field inspection. In the Grantee's correction letter, Mr. Jones cites the correction of the problem (a defective trunk cable connector).

Technical Parameters

Picture quality assessment, however, is only one subjective measure in determining technical compliance with the City's franchise, and is not directly mentioned in the Grantee's franchise or Part 76 FCC Guide lines as a test parameter. We relied heavily on the objective technical factors in rating the cable television system. Signal levels and their interrelation with system noise and distortion were considered while assessing technical compliance of the Berkeley system.

As noted within this report and the attachments, not all franchise and/or FCC guideline specifications were achieved. Many of the parameter discrepancies were either corrected by the Grantee after the failure was documented. The Grantee has submitted a correction report, dated September 19, 1989, which is attached.

Signal Leakage

While signal leakage does not appear to be a system-wide problem, we note that the Grantee has yet to conduct a leakage quantification, known as a CLI check. This evaluation, conducted to detect leaks in the system by either a 75% plant drive-out, or by flying over the plant, must be submitted to the FCC on or prior to July 1, 1990.

According to Mr. Jones' September 19th letter, Bay Cablevision will begin a CLI inspection on October 1, 1989.

Overhead Plant - General Order 95 Violations

As noted above, and documented in part in the attachments to this report, the Grantee's system has a large number of CPUC General Order 95 violations. The bulk of the violations stem from incorrect drop cable heights crossing public streets. As only an estimate, I project the number of G095 violations to be greater than 500, on a city-wide basis. The actual number may be much larger.

In the Grantee's correction report, Mr. Jones has provided a copy of a letter to their installation contractors citing the G095 requirements for future installations. Additionally, in my conversations with Mr. Jones, he has indicated that he will develop a program to identify existing G095 violations and have them corrected. As noted in the body of this report, the other overhead utilities in Berkeley (Pacific Bell, PG&E, et cetera) have G095 violations, as well. This will, to some degree, impede Bay Cablevision's correction program.

Underground Plant

The underground plant portion of the Grantee's system was judged to be in fair condition. We observed improper construction techniques (failure to use a shrink seal boot on the distribution cable and connector) at Test Point 14 (see photographs 892047 and 892048). Inasmuch as the underground portion of the plant makes up such a small percentage of the overall plant mileage, this is not a major issue, but is an issue which should be further investigated and cor-

rected by the Grantee.

1989 Subscriber Network Test Result Summary

We rated the Grantee Subscriber Network as having achieved compliance with the FCC technical guidelines evaluated at 11 out of 15 test points (73.3%). By projection, it is likely that this same percentage, or higher, will accurately reflect the entire system's ability to meet or exceed FCC specifications, were a 100% plant inspection performed.

5.20 CONSULTANT'S RECOMMENDATIONS

Based on the performance of the Grantee's subscriber system (documented above), the Consultant makes the following recommends to the City:

CONSULTANT'S RECOMMENDATIONS

The headend pickup of off-air channels should be improved so as to increase off-air carrier to noise

The tower should be grounded in accordance with the National Electrical Code

The antenna cables should be upgraded

All headend and antenna connectors should be wrench tightened

Weather seal boots should be used on all external headend antenna connectors

The Grantee should develop a formal plan to identify and correct all General Order 95 discrepancies

The Grantee should address picture problems noted in this report which have not yet been addressed

The Grantee should address all technical parameter problems noted in this report which have not yet been addressed

The Grantee should inspect the underground portion of its plant to insure that all connectors and ports are sealed to prevent water ingress.

Unjacketed cable should be inspected for physical deterioration, and replaced as needed

The Grantee should inform the City as to its specific intentions to address (or not address) the issues mentioned above. This should be done in writing. It would not be unreasonable to ask that this be done within 30 days after a formal request by the City.

Closing Comments

Prior to, during, and after our inspection, we received absolute cooperation from the Grantee's Berkeley Staff. Especially deserving of note are Messrs Malcolm Taylor and Dennis Jones. All information solicited of these gentlemen, and their staffs, was immediately provided. We were afforded the opportunity to see all portions of the plant. To assist us complete the entire inspection during our on-site visit, Mr. Jones and his staff put in many hours of overtime without complaint.

<END REPORT - ATTACHMENTS AND PHOTOGRAPHS FOLLOWS>

ATTACHMENT 1

INSPECTION LOCATION LOG

<u>TEST POINT</u>	<u>PHYSICAL LOCATION</u>	<u>COMMENTS</u>
	Berkeley Headend	
1	10th @ Heinz	Significant technical problems
2	1946 Russell	Broken tap port
3	5 Hillcrest Court	Severe direct pick-up on feeder
4	278 Alvarado	Longest cascade (25+1+1) problem
5	2401 Warring	
6	Allston @ Grant	
7	2330-2340 5th St.	
8	1517 Lincoln	
9	Hearst east of La Loma	
10	2840 Shasta	
11	636 Woodmont	
12	458 Vincente	Amplifier in severe overdrive
13	1129 Colusa	
14	2436 Bonar	Underground area
15	2307 Bonar	Underground area

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PHOTOGRAPH LOG

<u>LOCATION</u>	<u>PHOTOGRAPH NUMBERS</u>
Berkeley Headend	892000 thru 892018
10th @ Heinz	892019 thru 892020
1946 Russell	892021 thru 892022
5 Hillcrest Court	892023 thru 892024
278 Alvarado	892025 thru 892026
2401 Warring	892027 thru 892028
Allston @ Grant	892029 thru 892030
2330-2340 5th St.	892031 thru 892032
Lincoln east of Sacramento	892033 thru 892034 (Note 1)
1517 Lincoln	892035 thru 892036
Hearst east of La Loma	892037 thru 892038
2840 Shasta	892039 thru 892040
636 Woodmont	892041 thru 892042
458 Vincente	892043 thru 892044
1129 Colusa	892045 thru 892046
2436 Bonar	892047 thru 892048
2307 Bonar	892049 thru 892050

Note 1: This site was not inspected due to the lack of a unlocking tool needed to gain access to the tap port. The 1517 Lincoln location was substituted in lieu thereof.

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REPORT AND FINDINGS

* * *
BAY CABLEVISION CUSTOMER SERVICE
APPRAISAL AND RECOMMENDATIONS
CITY OF BERKELEY, CALIFORNIA
* * *

Communications Support Corporation
REPORT RPT89015.001

Submitted:
to

Mr. Sean Gordon

by

COMMUNICATIONS SUPPORT CORPORATION

John Risk
Director of Governmental Relations
* * *

Wally Seimbab
Project Manager

Draft Document Submitted
October 30, 1989

Final Version Submitted
November 30, 1989

BAY CABLEVISION CUSTOMER SERVICE APPRAISAL - BERKELEY

**BAY CABLEVISION CUSTOMER SERVICE APPRAISAL
CITY OF BERKELEY**

* * *

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BAY CABLEVISION CUSTOMER SERVICE APPRAISAL
CITY OF BERKELEY

* * *
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1.0

PURPOSE OF STUDY

Communications Support Corporation ("CSC") was retained by the City of Berkeley on August 1, 1989 to conduct a variety of studies related to the City's evaluation of its cable television franchise prior to renewal negotiations. This report is an assessment of the customer service record and the customer services currently provided by the cable franchisee.

Our research and inspections were divided into nine operational areas conducted during two visits to Bay Cablevision's Richmond office and one visit to Bay Cablevision's El Cerrito office. The nine operational areas included:

- (1) Office Organization and Staffing
- (2) Work Order Processing
- (3) Phone Service and After Hours Coverage
- (4) Service Call Ratios
- (5) Customer Complaints Filed at City Hall
- (6) Rates
- (7) Customer Surveys and Bill Stuffers
- (8) Policies for Subscriber Credits
- (9) Local Programming Activity

We also evaluated the method employed by the City in handling cable related customer complaints, and made recommendations on methods to log, respond, and track such complaints.

2.0

METHODOLOGY

Mr. John Risk, CSC's Director of Governmental Affairs, supervised all portions of the customer service assessment. During a four day period of October 6 through 9, Mr. Risk visited Berkeley to meet with key technical and operations staff of Bay Cablevision and members of City staff. These individuals included Malcolm Taylor, General Manager; Linda Crockford, Customer Operations Manager; Dennis Jones, Chief Technician; Kahlil Habeeb, Business Manager; John Newby, Marketing Manager; and Michael Gabbert, Access Technician. City staff included Sean Gordon, Senior Analyst; Jeff Baker, Management Analyst, and Steve Endsley, Senior Management Analyst. Also present during meetings with City staff was Harriet Moss, one of CSC's local representatives.

Mr. Risk also reviewed the customer complaint files maintained by the Public Works Department. In addition, CSC conducted a telephone response survey on three separate days (October 11, 12 and 18). The Appendix to this report contains selected forms and materials currently used by Bay Cablevision.

3.0

ITEMS IDENTIFIED BY CITY

At the meeting with City staff on Friday, October 6th, City representatives identified a number of additional issues for investigation. These issues were:

- o Toll-free phone service to Bay Cablevision
- o Billing notices and due dates
- o Billing in advance
- o Programming line-up changes associated with Pacific Sports Network
- o Service interruptions
- o Signal problems associated with Ch. 28
- o Consumer notification of City's audits of Bay Cablevision and community needs assessment using text messages on Ch. 28

4.0

FINDINGS

4.1 Office Organization and Staffing

Bay Cablevision does not maintain offices within the City of Berkeley. In order to return converters, get new batteries for remote control devices or pay bills in person, residents must travel to customer service operations at 2921 MacDonald Avenue in Richmond (the principal business and technical operations center), or 10042 San Pablo Avenue in El Cerrito.

A lunch hour commute between Berkeley City Hall and the Richmond office required 22 minutes one-way at posted driving speeds. The same trip over an alternate route at 9:30 AM took 18 minutes. The trip to the El Cerrito office took 25

BAY CABLEVISION CUSTOMER SERVICE APPRAISAL - BERKELEY

minutes one-way in the late afternoon. Parking at both offices was adequate.

Malcolm Taylor, General Manager of the Richmond cluster, has ten years of experience working for the cable system serving Berkeley. He previously served as Bay Cablevision's Technical Operations Manager assigned to the Berkeley rebuild. Mr. Taylor replaced former General Manager Earl Young in July, 1989.

Mr. Taylor's administrative duties include various management activities such as policy setting, payroll, accounts payable, budgeting, programming negotiations, hiring, staff supervision, and human relations.

Five senior staff members handle the key operational functions; Linda Crockford, Customer Operations Manager; Kahlil Habeeb, Business Manager; Dennis Jones, Chief Technician; John Newby, Marketing Manager; and Tony Felton, Head of Construction.

Ms. Crockford has a total of twenty five years of cable television experience, the past two and one half with Bay Cablevision. Ms. Crockford supervises a total of twenty customer service employees divided between the two Bay Cablevision offices. Ms. Crockford's duties include customer service, scheduling of installation and work-orders, billing, posting accounts, collections, and employee payroll. All twenty customer service representatives supervised by Ms. Crockford are available to assist the handling of Berkeley subscriber inquiries, however these

BAY CABLEVISION CUSTOMER SERVICE APPRAISAL - BERKELEY

individuals also assist subscribers from El Cerrito, Hercules, and Richmond.

Dennis Jones, Chief Technician, supervises a total of four employees assigned specifically to the Berkeley system. Mr. Jones worked on the cable system serving Berkeley for six years. He supervises all plant maintenance operations, installations, customer repairs, and the operation and maintenance of the system's headends and connecting hubs.

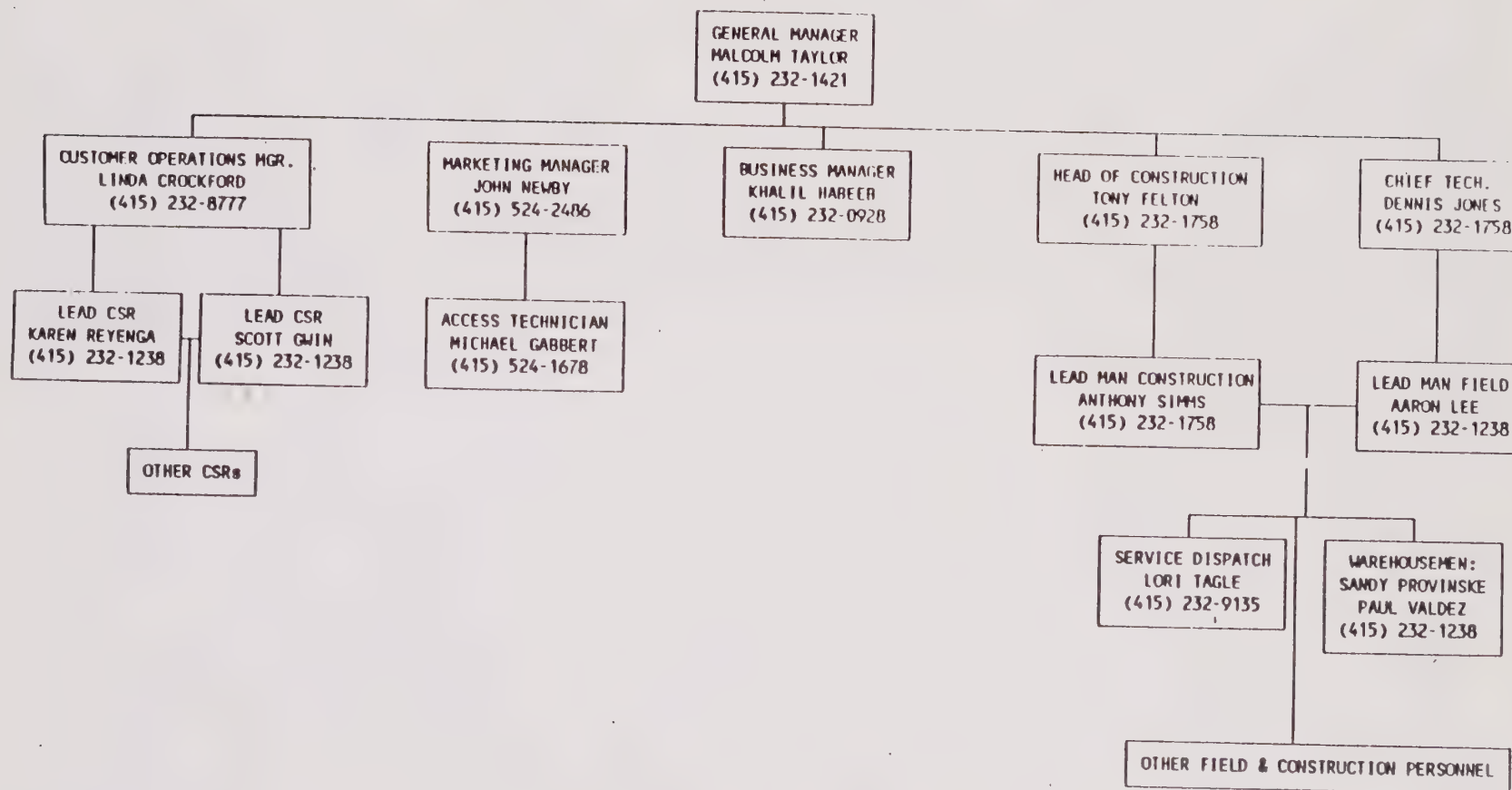
Technical staff include warehouse persons, trunk techs, feeder techs, and headend techs. Contractors include sweep techs, installers, and leakage auditors.

The business office is headed by Mr. Kahlil Habeeb. Mr. Habeeb is a certified public accountant (CPA) and handles business accounting for all four Bay Cablevision systems in the Richmond/Berkeley/Hercules/El Cerrito cluster. Each system has its own account identification and set of records. Berkeley's system is known as System 2. The business office is staffed only by Mr. Habeeb.

Marketing and local programming operations are staffed and operated out of the El Cerrito Office. These departments are currently staffed by only two full-time positions. The El Cerrito Office also includes a number of customer service representatives who work under the supervision of Ms. Crockford.

The chart on the following page describes the organization of staff members at Bay Cablevision as it was found during our visits October 6 - 9.

(Division 05)
 BAY CABLEVISION
 2021 MacDonald Ave.
 Richmond, CA 94804
 Phone: (415) 232-1238 Fax: (415) 232-0642



General Areas Covered: Berkeley
 Richmond (inc. & uninc.)
 Hercules
 El Cerrito

BAY CABLEVISION CUSTOMER SERVICE APPRAISAL - BERKELEY

As of September 30, 1989 there were a total of 11,659 subscribers to Bay Cablevision in Berkeley. A rule of thumb in the cable industry suggests that one customer service representative is needed for every 2,500 subscribers. Because the 20 customer service representatives identified during our research are assigned to duties associated with the entire cluster of Bay Cablevision system, we must assess Bay Cablevision's ratio with that of its entire subscriber base of 37,600 (as of October 9th). Dividing 37,600 by 20 results in a ratio of 1 to 1880. Bay Cablevision's ratio is well within the stated industry standard.

Another industry rule of thumb suggests that one service technician is needed for every 40 plant miles. In Berkeley, there are approximately 156 miles of plant serviced by Bay Cablevision. The four maintenance techs dedicated to Berkeley also satisfy this industry standard.

Bay Cablevision uses two outside firms to install cable into subscribers' homes. These firms are 1) Bay Area Contractors; and 2) Cable Communications Technicians (CCT). Employees of these companies are likely to make lasting impressions on Berkeley residents since installers are the first cable personnel subscribers personally encounter.

Bay Cablevision requires that these personnel dress appropriately; official tee-shirts, properly sanctioned hard-hats and gaffs when climbing poles, and picture identification badges issued by Bay Cablevision. Proper identification is important to prevent misrepresentation and possible criminal activity. Greater effort is underway at

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Bay Cablevision to standardize the identity of these respective contractors (such as requiring both companies to wear shirts the same color as Bay Cablevision). Bay Cablevision also requires that all installation service vehicles be clearly labeled with magnetic signs indicating the contractor's corporate logo.

Marketing and selling of services by Bay Cablevision is currently in a state of reorganization. The sales and marketing operations are supervised by Mr. John Newby out of the El Cerrito office. Mr. Newby has a background in corporate communications, video production, and marketing. Mr. Newby informed us that Bay Cablevision's door to door and telemarketing programs have been temporarily suspended. The majority of Bay Cablevision's current marketing efforts are conducted by direct mail. A description of current campaigns can be found in Exhibit F. Efforts are underway to design a comprehensive sales and marketing master plan. Therefore, little was discovered that pertains to Berkeley's residents.

Local programming operations are also supervised by Mr. Newby. Under Mr. Newby is Michael Gabbert, Cablevision's only full-time production staff member. Mr. Gabbert has been with the various City cable operators going back to TeleEvents (late 1970's).

Additional discussion of Bay Cablevision's local programming activities and facilities will be addressed in a subsequent section.

4.2 Work Order Processing

One of a cable operators' most important operations is handling customer work orders. Work orders may include new installations, changes in service, trouble calls, repairs, and cancellations.

Because Bay Cablevision uses an in-house computer system to process new installs and service call activities, the company uses a similar process to respond to consumer needs for both types of activities.

In each case, the subscriber would first speak with a customer service representative (CSR). The CSR would document the nature of the work to be performed (in the case of a new install and change orders) or the nature of the problem (in the case of technical service orders).

Most requests for service are taken over telephone. Only in the case of disconnects does the company require written requests. This policy was adopted in response to people being maliciously canceled by unrelated third parties.

The following two diagrams illustrate the flow through Bay Cablevision's office after a resident requests a new installation, or after a subscriber reports a problem to a service representative (CSR). In each case, the CSR documents all activity related to the subscriber's request by entering information into the system's central computer. These computer files are used to print-out work-orders which are used by the various contractors or technicians to per-

form work, track equipment inventory, and acknowledge completion of the work by the subscriber.

CHART 4.2.1

BAY CABLEVISION INSTALLATION PROCESSING (New Subs.)

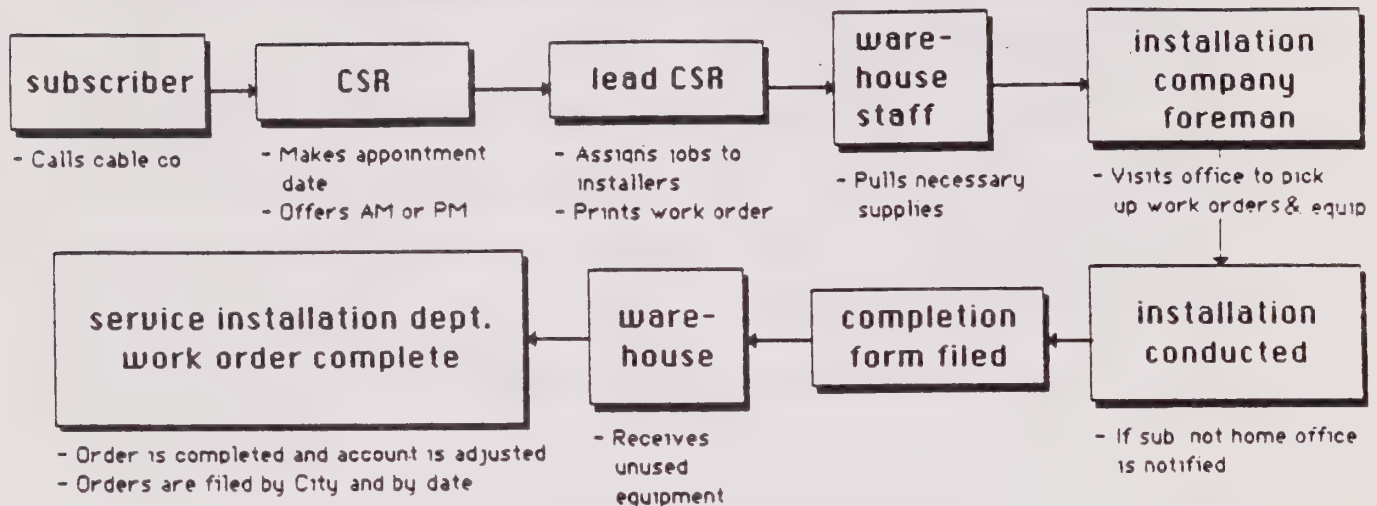
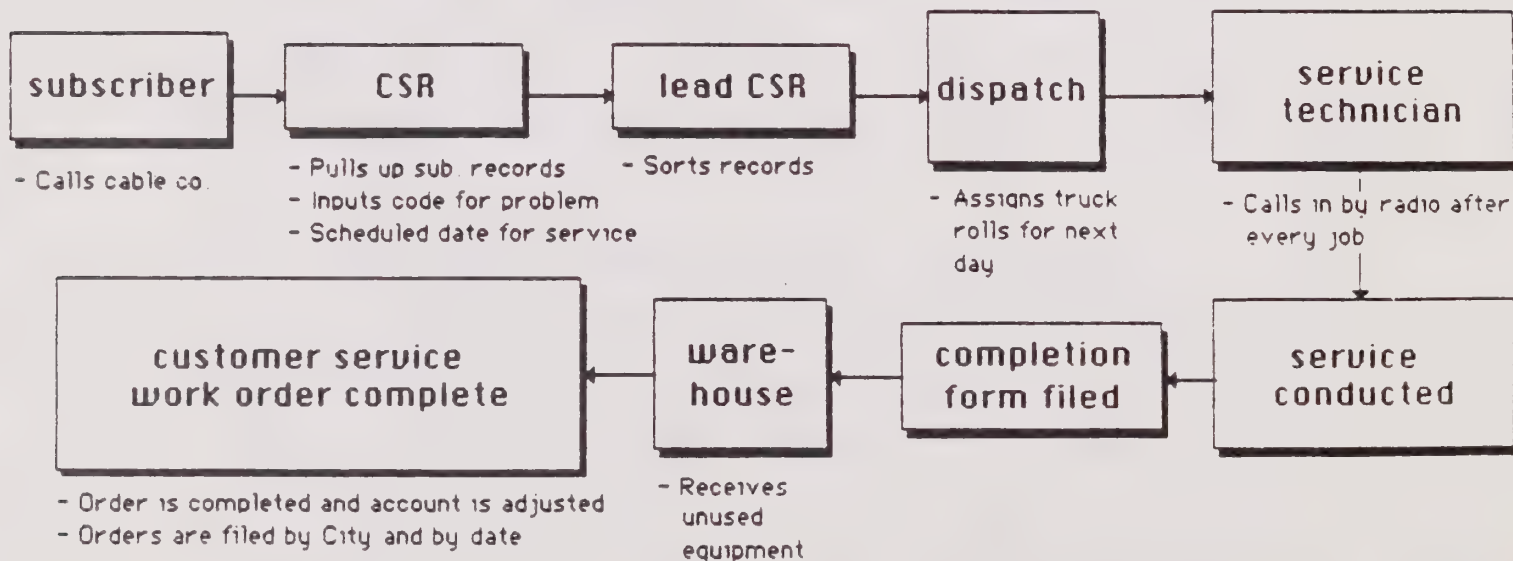


CHART 4.2.2

BAY CABLEVISION SERVICE CALL OUTLINE (Repairs)



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Once work has been completed by Bay Cablevision's technicians, the customer's signature is requested using an on the workorder to confirm that work was performed to the satisfaction of the customer. An example of a workorder related to a trouble call is attached in Exhibit G.

In the case of new installations, Bay Cablevision uses a separate form. On one side of the form is the work to be performed and on the other side is what's is referred to as the "subscriber agreement". These forms are attached as Exhibit A.

Also at the time of new installations, subscribers are provided a "Disclosure Statement" which further defines terms and conditions of Bay Cablevision. This statement is attached as Exhibit B.

The installation workorder and subscriber agreement form (Exhibit A) clearly lists the terms and services to be provided. For example, it declares Bay Cablevision's billing and cancellation policies, converter deposit policy, right to access subscriber's property, notice regarding adult programming, and a statement supporting the protection of subscriber's right to privacy.

However, it is deficient in disclosing a subscriber's right to request an A/B switch for use in selecting between the subscriber's off-air antenna and Bay Cablevision's cable. Under FCC policy to be implemented on November 1, 1989, all subscribers must be given notice at time of installation that an A/B switch could, upon request, be installed at the subscriber's expense.

Similarly, Bay Cablevision's disclosure statement (Exhibit B), while addressing such pertinent information as rates, billing, customer service, and special charges, also does not address the A/B switch disclosure. Furthermore, the disclosure statement does not look like an official document. It measures only 7 x 6 3/4 inches (probably so that when folded it will fit in a billing envelop), is printed on blue paper on the backside of a rate schedule. Because most subscribers are handed this document for the first time with many other papers (operating manuals for VCR hook-up, converter operation, channel guides, and work order receipts), we believe most people do not read through this document as they should.

In an effort to increase the effectiveness of this disclosure statement (especially in conveying such things as policies for advance billing, charges for late payments, phone numbers to call to request customer assistance, phone numbers to seek assistance from franchising authorities, etc.), we recommend that the form be printed on official Bay Cablevision letterhead in an envelope that reads "important disclosure information enclosed -- please read before signing subscriber agreement." We also recommend that both the disclosure statement and the subscriber agreement be modified to reflect current FCC policy for A/B switch notification.

As stated earlier, Bay Cablevision uses an in-house computer system for tracking customer service

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activity and for processing billing and payments. Ever wonder what your file might look like at the cable company? Exhibit C is a sample screen print of what the cable company representatives call-up on their computers when speaking with subscribers about billing or service matters.

Also included in Exhibit D are copies of door hangers and other notices to subscribers who are slated for installations, service calls, or disconnects. These are useful methods for communicating with subscribers.

Exhibit E show examples of a form used when subscribers return or exchange equipment.

In conclusion, Bay Cablevision's method of handling customer service calls and new installation requests were found within normal industry practices and appear adequate to meet the needs of Berkeley's cable subscribers.

4.3 Office Hours/Phone System/Hours Coverage

Bay Cablevision maintains walk-in office hours between 9:00 AM and 5:00 PM, Monday through Friday. Telephones are answered by CSR's Monday, Wednesday, and Friday 9:00 AM to 5:00 PM; Tuesday, Thursday 9:00 AM to 7:00 PM; and Saturday 9:00 AM to 1:00 PM. Offices are closed Sunday. Only requests for new installations and customer service are handled on Saturdays (no trouble calls). Most trouble calls are performed on a Monday - Friday basis. Some exceptions are made for major service problems by accommodating subscribers on Saturdays. Malcolm Taylor indicated that Bay Cablevision might open the Richmond office to walk-ins on Saturdays

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beginning in November.

During our investigation, we were unable to identify a single complaint from any subscribers concerning insufficiencies in Bay Cablevision's office hours.

Bay Cablevision has a rather elaborate telephone "automatic cueing" system. Installed during the past year, this system is known as the "Executone" and is manufactured by Isotech. Sixteen incoming rotary lines are attached to the system for its main customer service phone listing (232-1238). Cablevision's goal is to limit waiting on hold to under 1 minute once the subscriber has entered the ACD (automatic cue dialer). Four other direct lines are provided for administration and business office functions; two additional lines for installation and dispatch; and one direct line for marketing and local programming.

After-hours phone service is provided by answering machines and an independent answering service which is chosen by the subscriber. The answering service is referred to by the ACD message at the close of each business day.

Bay Cablevision's company policy to answer telephone calls with a live customer service representative (CSR) within 60 seconds of entering the ACD cue for a specific department is considered very aggressive given industry standards (two minutes or less). To check the company's adherence to this corporate goal, CSC contacted the company by telephone ten times a day for a three day period. Calls were made during the company's regular office hours and were spread throughout the day.

Upon calling the company using the service numbers for the Berkeley service area, a caller is initially met with voice mail system which directs the caller to select one of four extensions. Each extension corresponds with a customer service operator and computer terminal geared toward administration, billing, installation, or collections. When phone traffic fills one extension, calls automatically roll over to another. CSR's are trained to handle all extensions.

Calls to the company were made on the 11th, 12th and 16th of October during Bay Cablevision's posted office hours. These dates were randomly selected. Timing for the survey began after the selection of the extension was made. All extensions were contacted equally. No calls were made after hours or on weekends.

TELEPHONE RESPONSE TIMES FOR BAY CABLEVISION

Date: 10/11/89

10/12/89

10/16/89

Response			Response			Response		
Time	Time	Ex. Notes	Time	Time	Ex. Notes	Time	Time	Ex. Notes
9:30	1:03	1	9:05	0:30	1	10:15	0:00	1 Busy
9:45	0:40	2	10:00	0:00	2 Dis	10:16	0:31	1
11:00	1:14	1	10:05	0:45	3 Prob	11:00	0:19	2
11:45	4:32	2 Dis	11:30	5:00	1 Ab 2	12:30	5:00	3 Prob
11:50	0:37	2	11:45	0:20	2	1:00	1:40	1
1:00	0:25	1	12:30	0:15	3	1:45	0:33	2-
2:00	1:13	3	1:00	1:20	1	2:45	0:32	3
2:50	0:50	2	1:30	2:05	2	3:45	0:33	1
3:45	0:18	3	2:30	0:18	3	4:45	0:12	2
4:30	5:00	3 Ab 1	3:10	0:13	1	5:00	0:33	3

Timing began after selection of extension was made.

Calls to each extension automatically roll to another if they are busy.

Abandoned Calls; 1 = 16 minutes 2 = 10 minutes. Both tabulated as 5 minutes.

Prob. = Company telephone problems were indicated

Dis. = Disconnected by company

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As can be noted by the above chart, Bay Cable had some difficulty meeting its own telephone response standards. Of the thirty calls attempted over the three day period, seven were aborted due to the following reasons: 2 disconnects; 2 abandoned calls after holding for longer than 5 minutes; 2 company telephone problems; and 1 busy signal. This represents 23% or almost a quarter of the total calls made.

Of the calls which got through to a customer service representative, eighteen calls (60%) were answered within the company's 60 second goal. The median response time for all 30 calls was 30 seconds which is well within the company's standards.

Bay Cablevision has a technician assigned "on-call" each night and on weekends to handle outages and other system emergencies. If the answering service receives three or more calls from subscribers effected in a similar fashion within the same geographic area, an "outage" or loss of signal is determined by the answering service to have likely occurred, and the "on-call" technician is notified. Outages effecting numerous subscribers are considered to be emergencies and are acted upon by the company at all times. Smaller problems effecting one or two customers are not handled in this fashion.

Bay Cablevision also tracks outages using the workorder form included in Exhibit G. Response time guidelines for technicians to reach a pole to correct an outage is under 60 minutes according to Dennis Jones. Mr. Jones also indicated that most minor outages take fewer than 30 minutes to

correct.

More discussion of outages occurs in section 4.8 when we address Bay Cablevision's policy for subscriber credits.

The structure and hours of operations of Bay Cablevision are found to be consistent with industry practices.

4.4 Service Call Ratios

The internal corporate policy is to complete new installs within 3 days of order and to complete service calls (trouble calls) within 24 hours during weekdays. These are relatively aggressive policies directed toward providing prompt customer service.

Mr. Taylor and Ms. Crockford track service calls weekly and monthly. Ms. Crockford provided us with service call data for the month of September 1989, and for the 21 month period from January 1988 to September 1989.

Service call records are designed to describe the frequency and categories of service problems attended to by the cable company. These records usually only reflect the types of complaints that are acted on by sending a technician to a person's home. They do not describe the frequency and nature of problems reported and resolved over the telephone by the company's customer service representatives.

The chart on the following page lists service call data for the period January 1, 1988 through September 30, 1989.

CHART 4.4.1 SERVICE CALL CATEGORY COUNT
JANUARY 1, 1988 - SEPTEMBER 30, 1989

SYSTEM 02

CODE	DESCRIPTION	NUMBER PRIMARY	NUMBER SECONDARY
	SERV. AREA	1	
	SERV. AREA	1	
A	A/B SWITCH	19	2
B	BREAK IN LINE	39	7
C	BAD CONVERTER	209	5
D	DISC. IN ERROR	332	35
D1	RED-TAG DISCO	2	0
E	CUSTOMER ED.	355	49
E1	CATV SWITCH	3	0
F	F FITTING	1,773	209
G	HOUSE SPLITTER	65	133
H	HEAD-END	37	7
I	INSTALL CONVERTER	75	29
J	DROP POLE/HOUSE	272	23
J1	RE-ATTACH CABLE	1	0
J2	RE-MOVED CABLE	1	0
K	ILLEGALS	95	23
L	DROP USE TO SET	60	26
M	SPLICE	43	21
N	NOT HOME	1,583	30
N1	NO ONE OVER 13	1	0
O	OK WHEN CALLED	1,535	23
O1	CANCEL AT DOOR	7	0
P	SET PROBLEM	221	21
Q	HOUSING FAILURE	2	0
S	BAD INSTALL	144	22
T	TUNED SET	107	42
U	BAD TRAP	251	70
V	CABLE SPLICED	11	5
W	VCR	102	13
X	TAP REPLACED	54	3
Y	PWR PAC FAILURE	4	1
Z	CONST. COMPLETE	6	0
0	PG&E OUTAGE	55	13
1	AMP. FAILURE	234	13
2	POWER SUPPLY	20	7
3	LINE SPLITTER	9	1
4	TRUNK CONNECTOR	13	0
5	FEEDER CONNECTOR	71	13
6	LINE EXTENDER	4	5
7	LOW SIGNAL - ADJ	31	24
8	HIGH SIGNAL	33	5
9	BLOWN FUSE	73	7
TOTAL FOR SERV. AREA		1	2,544
TOTAL FOR SERV. AREA		1	5,544

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The normal cable industry goal for managing customer service calls (number of times a technician is dispatched to the home) is strive to keep monthly service calls activity within a range of 3 or 4 for every 100 subscribers (or 3% - 4%). In order to analysis Bay Cablevision's performance in this area, we requested data for the period January 1, 1988 to September 30, 1989. From this data, which is shown on the following page, we calculate that Bay Cablevision's service call ratio is just over 4% per month (8544 divided by 12 months divided by 11,659 subscribers).

From the chart, we can see that biggest service problems stem from bad "f" fittings (1778 cases). Next biggest categories included disconnects in error (832 cases), customer education (355 cases), bad trap (281 cases), bad drop from pole to house (272 cases), amplifier failure (234 cases) set problems (221). F-fittings are the connectors used to attach the cable to subscriber's terminal equipment; pole to house drops are the lines leading from the pole to your home; traps are devices used to scramble and descramble pay-services).

Almost 19% of the truck trips (1588 cases) to people's homes had to be rescheduled due to persons not being home at the time. This represents a productivity problem that usually can be rectified by making calls to the subscriber's homes early in the day to confirm the subscribers appointment. Bay Cablevision schedules calls in either the morning or afternoon depending on the subscriber's and

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makes an effort to contact the subscriber before arriving. Every cable company experiences subscribers missing their appointments and Bay Cablevision's numbers are not too far outside industry norms.

In almost as many instances (1535 cases) technicians found the subscriber's service to be operating completely normal with no problems what so ever. This can be equally costly in terms of productivity and can be attributable often to isolated and intermittent plant problems, subscriber error and lack of education

Since this category, and those related to set tuning (106 cases); VCR's (102 cases); customer education (355 cases); and not at home (1588 cases) represent more than 43% of the customer service calls, the company should do more to educate its subscribers.

Bay Cablevision's F-fitting statistic are higher than preferred and should be asked to explain what is being done to improve in this area. Furthermore, as a means to satisfy the concerns of City's Cable TV Task Force, Bay Cablevision should be requested by the City to provide quarterly service call performance reports such as the one provided above.

4.5 Customer Complaints Filed At City Hall

This study included review of the subscriber complaint log kept in the Public Works Department at City Hall. This Department is responsible for handling cable complaints. Subscribers complain to the City when their service problems are not satisfactorily resolved or when

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they are unable to contact the company.

The complaints activity was previously tallied annually and presented to the City Manager's Office by former Administrative Analyst, Terri Robinson. The current log included a report from former Berkeley Administrative Analyst, Terri Robinson comparing complaint data collected from January 1987 to July, 1988.

Past City reports from Ms. Robinson on customer complaints indicate that the most frequent problems experienced by subscribers include: notifying the City for poor signal reception; missed service appointments by the company; billing discrepancies; and installation problems. The reports indicate that most individual complaints registered with the City were resolved through the assistance of City personnel contacting Bay Cablevision's Customer Operations Manager. The report also indicates that the cable company's management has tended to respond when individual service problems were raised by the City.

CSC compared customer complaints logged at the City during 1989, and those logged during the two previous years. Information for the current year was tabulated from the complaint files recorded in the Department of Public Works, while information for 1987 and 1988 was gathered from the annual cable television complaint reports on file. These reports are attached at Exhibit H.

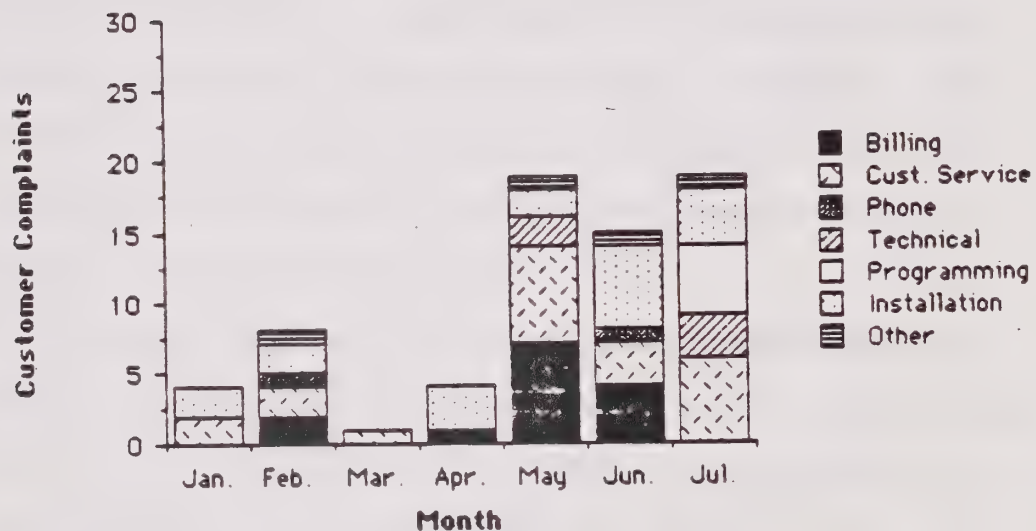
The charts on the following two pages indicate that complaints have remained at a steady level over the past three years.

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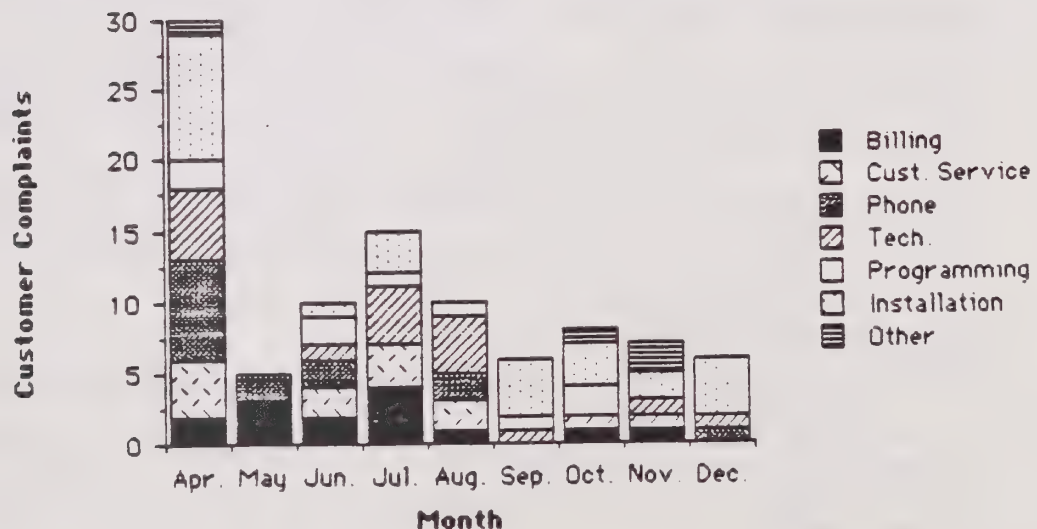
Customer Complaints 1989 by Month



Customer Complaints 1988 by Month



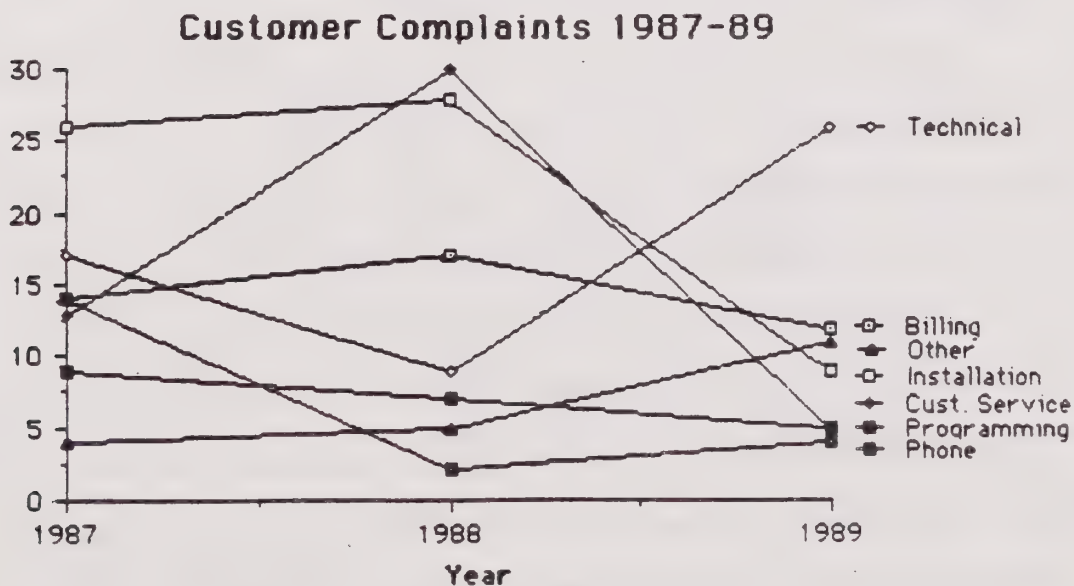
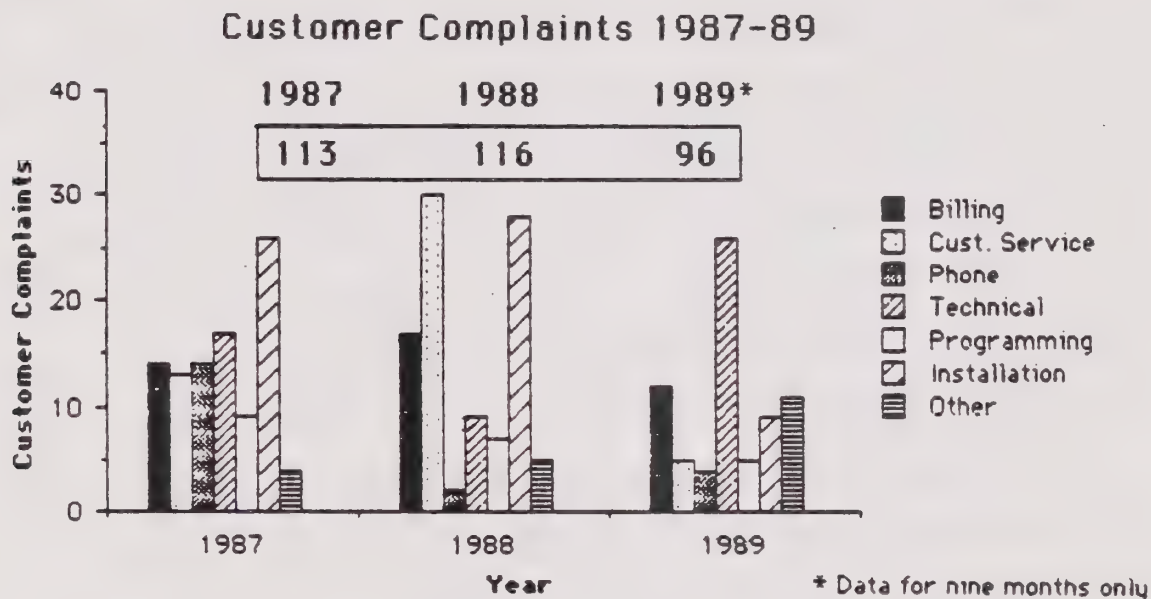
Customer Complaints 1987 by Month



The total number of complaints in 1987 and 1988 were 113 and 116 respectively. The 1987 total had to be interpolated due to the City's method of recording data in 1986 and 1987.

The year-end total for 1989 was forecast by averaging the 72 calls reported as of September, 1989. The total suggests a small improvement over the previous years.

The following two graphs shows these trends over three years.



Information from these reports were for partial years only (not all months in the year were reported). Our charts and graphs are adjusted accordingly. Our 1989 compilation includes only the first 9 months of the year. The City's records are incomplete for 1985 and 1986. These statistics were not segregated by year or category and were excluded from our analysis.

The categories which received the most complaints were that of installation, technical problems, customer service and billing. During 1987 and 1988, installation problem complaints comprised a significant amount of customer grievances to the City. The data suggest that this problem has subsided by at least 50% in 1989. Conversely, technical problem complaints have shown a significant increase during the current year and comprise its largest category. Malcolm Taylor attributed most of this rise to the technical disruptions related to the rebuild.

Because the company's service call records that were discussed earlier in Section 4.4 of our report were not available by month, no correlations could be identified between the company's information and that of the City's.

Another area which has apparently improved during this year is the complaints about customer service. Complaints of this nature often involve dissatisfaction about the way the subscriber is handled by the CSR's or lapses in the company's ability to properly inform customer of billing and service information. Customer service complaints was the

largest category of complaints in the previous year.

The billing complaints is a category that remained fairly high over all three years our review period. This fact was also supported by an inspection of letters and correspondence at the cable company's offices. One of the issues identified by the City prior to our analysis is the problems associated with a short payment remittance period. We will address this issue in greater detail in Section 4.8 of our report.

Complaints relating to the company's telephone response time was relatively small over the current and past year compared with other complaint categories. This is particularly noteworthy because the cable industry has been notorious for moderate to substandard telephone response. Such a record is a positive indication that the company's service standards for telephone response and partially attributable to the company's recent purchase of an advanced telephone system.

Our monthly analysis of the current year outlines the increase in technical problem complaints filed with the City. Such complaints have reduced in frequency over the few months prior to this study with a majority of complaints being recorded over the first half of the year. A monthly comparison of all three years reveals no consistent record of reoccurring problem months which would prompt subscribers to contact the City.

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4.6 Rates

Charges for Bay Cablevision services as of August 1, 1989
as follows:

Basic Cable Services.....	\$14.95
* Some older TV sets need a converter	
Converter Box.....	Free
Additional Converter.....	\$3.00
Remote Control Converter Box.....	\$4.00
Remote & Volume Control Converter Box....	\$5.00
Deposit for First Converter.....	\$30.00
Deposit for Additional Converters.....	\$15.00
Additional Room Outlet.....	\$4.00
Pay Services: HBO.....	\$10.95
Showtime.....	\$10.95
Cinemax.....	\$9.95
Disney Channel.....	\$7.95
Premium Channel Discount.....	None
Installation Charges:	
New Line Installation.....	\$30.00
Reconnect Current Line.....	\$30.00
Billing Name Transfer.....	\$15.00
Additional Room.....	\$25.00
FM Radio Installation.....	\$10.00
Senior (over 65) and Physically Challenged Basic Cable Discount.....	\$12.05
A/B Selector Switch (monthly).....	\$1.00
Penalties:	
Late Charge.....	\$1.00
Non-System Related Problem.....	\$25.00
Equipment Misuse.....	\$25.00
Missed Appointment.....	\$10.00

Although no comparative research was done regarding rates in neighboring communities, our experience in Southern California cities and information gained from a national cable rate study conducted by the General Accounting Office (GAO) of the Federal Government published in September 1989, suggests that the rates charged by Bay Cablevision approximate the averages found across California and the country.

The GAO found the national average for basic cable rates in 1988 for cable systems the size of Berkeley's to be

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\$14.53, slightly less than what Bay Cablevision now charges for basic services. According to a survey conducted by the Orange County Register in August of 1989, average rates for basic cable television service in 17 Orange County, California cities was \$17.50.

Rapid rise in rates since the passage of the Cable Communications Policy Act in 1984 has upset many cable subscribers across the country. Current legislation is under consideration to strengthen cities' rate regulatory powers. In fact a resolution from the City of Berkeley will go the National League of Cities this December to request legislative action to review the 1984 Cable Act with regards to rate regulations. But until the regulatory framework changes, the City lacks power to affect the rates charged by Bay Cablevision.

4.7 Customer Survey/Bill Stuffers

Bay Cablevision provided CSC with copies of door hangers and bill stuffers for notifying subscribers of various information (Exhibit D), rate schedules (Exhibit B), a viewership study (Exhibit K) and a local programming survey (Exhibit L).

The channel line-up/viewership survey found in Exhibit K was commissioned by the cable company in 1988 and set forth to 1) ascertain the levels of usage and value of basic and premium channels subscribers receive; 2) examine customer awareness of Bay Cablevision's plans to improve quality of service; ascertain customer reactions to the

cable guide; and evaluate customer satisfaction with Bay Cablevision.

For a channel by channel review of the study's findings please refer to the charts in Exhibit K. As for satisfaction of subscribers for the monthly cable guide, 11% of the subscribers found the guide to be "excellent," 55% called it very good or good, and 34% called it "fair" or "poor."

This study included some interesting questions of the subscriber's knowledge of governmental regulation. 66% of those interviewed said they didn't know whether or not cable rates are regulated by the government, while 20% thought they were and 14% thought they weren't. A total of 30% of subscribers said that they thought they company was required to carry all "off-air" broadcast channels. Only 18% knew correctly that company's are not required, and 52% were not sure.

Finally, and important to many of the City's recently heard complaints concerning the Pacific Sports Network not being carried by Bay Cablevision, 46% of the sample did not know whether the company was free to change the line-up as it saw fit. Only 46% knew the right answer that they could make programming changes without governmental intervention. A total of 8% thought that the company could not make changes without governmental approval.

Consequently, the need for education rests with both the cable company and the City in helping subscribers know

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the limits of the law (Cable Communications Policy Act of 1984) with regard to rates, programming changes, and must carry.

Cablevision is currently in the process of developing a comprehensive marketing and audience profile study. This project is under the direction of Mr. John Newby, however because of its infancy no information was available at the time of our visits. Mr. Newby said that the details of it will be shared by the company once they are formulated.

Former General Manager Earl Young offered a subscriber feedback form that could be used to gather information from subscribers regarding employee and company performance. This form was mailed to all subscribers and outlines a procedure for subscribers to officially file a complaint against the company. A copy of this form is attached in Exhibit I.

Because the responses to this survey resulted in personnel action, the company did not feel at liberty to share individual copies with CSC.

Finally, the local programming survey attached in Exhibit L. This survey was designed by Mr. Newby to ascertain needs and interests of producers of Bay Cablevision's Programming Network (BCPN - Ch. 28). Additional discussion on this survey is included in Section 4.9 of this report.

4.8 Policies For Billing Subscriber Credits

One of the issues raised by the City is that residents are not being given sufficient time to pay their bills. Bay

3/8

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Cablevision mails their bills on the 26th of the month and payments are due by the 7th of the following month. Bay Cablevision allows a grace period of 10 calendar days before a payment is considered late. Late payments are subject to a "late charge" of \$1.00. This charge was recently reduced from a previous charge of \$5.00.

CSC surveyed five other cable companies to find out what their payment remittance periods were. The survey showed that the five other cable systems (United Cable, San Leandro; Viacom, San Francisco; ATC, City of Orange; Comcast Cablevision, Santa Ana; and Century Southwest Cablevision, Beverly Hills), all had billing remittance periods between 7 and 15 days with a grace period of an additional two weeks in all cases except for United Cable. Bay Cablevision's ten day grace period before a payment is considered late is fairly shorter than that of the other systems we investigated indicating that subscriber concern in this area may indeed be justified. In comparison, billing due dates for residential Pacific Bell telephone service is 15 days for those who have had service less than one year and 25 - 30 days for those who have had the same service longer. Pacific Gas and Electric residential customers are given a 19 day period in which to remit payment.

We asked Mr. Taylor to disclose Bay Cablevision's policy for subscriber credits. He indicated that credits are provided upon request, and usually after verification by office staff that an outage or interruption of service had occurred. He also indicated that the subscriber usually is

given the benefit of doubt.

The company credits a prorated amount based on number of days a subscriber is without service. The amount is determined by dividing the subscriber's monthly bill by the number of days without service. This policy is consistent with policies of other California cable operators.

4.9 Local Programming Operations

CSC chose to include a cursory examination of Bay Cablevision's local programming operations because it believes local programming to be a fundamental form of customer service to cable subscribers. Although the Berkeley franchise is silent in its specific requirements for local programming resources, both the Cable Act of 1984 and legislative history surrounding the Act and prior FCC policies, give importance to local programming as a fundamental aspect of cable television service providers.

Statements of need and recommendations for levels of access support to meet these needs will be addressed through the community needs assessment.

This section of the report instead provides an overview of the type of operation currently supported by Bay Cablevision for various types of local programming in Richmond, El Cerrito and Berkeley.

A studio facility roughly 25' X 30' in size is housed at the rear of the El Cerito office. This facility is used for both commercial and local programming activities. The studio is moderately equipped with various 2 combination

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studio/portable cameras, limited overhead lighting, 4 video tape machines, and audio equipment. Though much of the equipment is dated, innovations in how the studio is utilized gives the facility as much capacity as can be expected from a limited amount of equipment.

The facility is supervised by John Newby and maintained by Michael Gabbert. Both individuals have past experience in commercial television and production houses. Neither, have extensive experience in public access television, although each have previous experience teaching clients, fellow employees, and interns in the use of video production equipment.

Bay Cablevision does not currently provide training workshops associated with traditional public access operations. Instead, it is in the process of slowing things down in an effort to study and develop plans for revamping both the facility's equipment and operations. Related to this endeavor is a questionnaire designed to assess the interest of viewers and potential local programming producers. This survey is attached as Exhibit L.

The survey is dated August 23, 1989 and as of our visit, results were not available for review.

Originally, the El Cerrito facility only served El Cerrito cable customers. It is now designated to serving all five of the Bay Cable communities. The fact that the studio facility is located in El Cerrito creates difficulty for convenient access by Berkeley residents. Our experience

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has shown that facilities and training workshops offered within the franchised area are best utilized by residents and are better regarded as true community resources.

Moreover local proximity improves visibility and the inherent benefits this brings to educate community awareness and participation.

Limited public access promotion, training, and facilities were found during our inspections. Instead, the facilities and limited number of staff positions assigned to production activity are characteristic of "local origination" and "commercial production" operations found throughout the industry.

5.0

RECOMMENDATIONS

We first will provide recommendations related to the City's concerns outlined in Section 3.0.

1) Toll-Free Dialing: As stated in CSC's letter sent to the City via fax on October 16, 1989, Malcolm Taylor and CSC discussed the case of Mr. Thompson concerning toll charges for dialing Bay Cable. Malcolm stated that although it would not be likely that Bay Cable would invest in an 800 (Wats) line, Bay Cable would be more than happy to credit Mr. Thompson or any other subscriber who has to pay toll charges when phoning their offices. Malcolm would like Mr. Thompson to submit a copy of his phone bill to Bay Cable along with a letter explaining the charges. Malcolm would arrange credit against Mr. Thompson cable service.

Due to the burden of contacting the company and the cost associated with mailing and copying documents, Bay Cable should again reconsider adding a 800 toll free number or establish a local call forwarding number. The call forwarding number would entail the establishment of a few local phone lines at a remote location which would automatically forward all incoming calls to the appropriate location.

BAY CABLEVISION CUSTOMER SERVICE APPRAISAL - BERKELEY

2) Text Announcements on Ch. 28: Malcolm Taylor indicated full support to allow the City to place text messages related to the City's audits of Bay Cable, provided the City would provide copies of subscriber's comments so that Bay Cable could benefit from the sampling. He has no problems having comments from subscribers going directly to the City provided copies be sent along to Bay Cable.

As we discussed in our meeting with City staff on Friday, October 6th, CSC recommends that the messages instruct subscribers to submit comments in writing to Jeff Baker, City of Berkeley. An example message may read as follows:

P.1

*****YOUR INPUT IS NEEDED*****

The City of Berkeley is interested
in knowing how you feel about the services
of Bay Cablevision.

P.2

The City is conducting
a comprehensive audit of Bay Cablevision
as well as assessing our community's
needs related to cable television.

P.3

Please send your comments to
City of Berkeley Cable TV Task Force
c/o Jeff Baker, Department of Public Works
1326 Allston
Berkeley, CA 94702

3) Advance Billing: Bay Cablevision's practice related to billing is not unlike many cable companies. Every cable company we spoke with bills their subscribers one month in advance. They do this to prevent theft of service. However we believe that not enough time is allowed between when the bills are mailed and when the bills are due. Bay Cablevision indicated that it is planning to add another cycle to its billing efforts. As part of this effort, the City of Berkeley should request that Bay Cable allow 30 days from billing date to payment date. Payment should not be considered late until 30 days after the billing date.

4) Programming line-ups: Recent complaints received by the City related to Bay Cablevision's programming line-up (e.g. failure to carry Pacific Sports Network) are difficult to resolve. Under the Cable Act, the city cannot regulate the types of channels that a cable company provides its residents. It can however review the effects on the company's "mix" of programming when channel line-up changes occur. In a review of the files at both City Hall and at Bay Cablevision, programming related complaints were some of the least frequently received. However, this doesn't mean that those pertaining to a specific channel such as Pacific Sports Network, should go unnoticed, nor unemphasized by the City.

We recommend that the City copy all letters in its files related to PSN and share them with Bay Cablevision. Malcolm Taylor should weigh this form of popular demand in establishing Bay Cablevision's corporate decisions related to programming. It would seem that PSN would be an appropriate addition to the channel line-up given its strong local appeal. We recommend these subscriber letters be transmitted along with a letters of support from key members of City staff and local elected officials who share this viewpoint.

5) Service interruptions: We recommend that both the City and Bay Cablevision provide one another monthly reports which summarize subscriber complaints and service activity. Such communications will improve the response to correcting service problem of those complaints logged at City Hall, plus it will provide the City with a glimpse of what the company is doing to rectify these problems. Monthly reports from Bay Cablevision should be generated by their computer and include information similar to that provided to us during CSC's audits (See Section 4.4 page 19).

6) Signal Problems Associated with Ch. 28. We observed no signal irregularities on the day that we visited Bay Cable. We suggest that the City continue to include this intermittent problem as a regular item for discussion with Bay Cablevision staff at monthly task force meetings.

The City should also insist that Bay Cablevision management immediately address the following issues:

- 7) Request that Bay Cablevision's Customer Disclosure Statement be reprinted in official company letter head and delivered to the subscriber at the time of installation in an envelop that reads "important disclosure information enclosed -- please read before signing subscriber agreement." We also recommend that both the disclosure statement and the subscriber agreement be modified to reflect current FCC policy for A/B switch notification.
- 8) Request that Cablevision send a letter to all subscribers outlining Cablevision's billing and credit policies.
- 9) Request that Cablevision post in its lobby of the Richmond and El Cerrito offices, its policies related to A/B switches and customer credits.
- 10) Request that Cablevision increase its consumer education in scheduling service calls in the morning or afternoon; and in trouble shooting problems related to fine-tuning, VCR, and converter operation. All customers

BAY CABLEVISION CUSTOMER SERVICE APPRAISAL - BERKELEY

should be called early in the day to remind them of the scheduled service call.

- 11) The City should also examine its ability to provide helpful information to cable subscribers concerning its ability to regulate or not regulate various aspects of Bay Cablevision's business practices.
- 12) All correspondence and complaints received at City Hall should be directed to one point of contact. We recommend that this point be Mr. Jeff Baker's office in the Department of Public Works. A single "master file" system should be created and stored chronologically by fiscal year. Information and statistics should be compiled monthly and written into reports on an annual basis.

As part of these records, Bay Cable should be requested by the City to provide quarterly service call performance reports. Such reports should include data on the length of time needed to fulfill requests and correct problems after the initial call. Telephone response time reports should also be included with this information.

- 13) Finally, the City should ask its legal adviser to provide the appropriate consumer protections for the new franchise. Contemporary consumer protection standards include the following:

Items astericked are internal goals of Bay Cablevision as discovered during our investigations:

- * Respond to and resolve customer service calls within a 24 hour time period 7 days a week. Minor problems not affecting all channels may be resolved within 48 hours.
- * Four hour scheduling window for repair (now mandated by State law)
- * Credit offered to subscribers for outages over 24 hours.
- * Telephone response time with live company representative within one minute.

Office contact hours for billing and installation at a minimum of 8 hours a day M-F and 4 hours on Saturday.

Complaint and problem calls handled 60 hours a week

- * 24 hour emergency repairs including weekends and holidays
- * Telephone answering capability 24 hours a day providing at least emergency referral information

- * Provide all subscribers with information on all services and fees of the company.
- A/B switch information distribution to all subscribers
- * Privacy information distribution stating possible uses by the cable company of subscribers' names and addresses.
- * Provide information on company identification including telephone numbers and address.

Provide information on parental control devices.

- * Non-discrimination on fees so that no subscriber is paying more for service than is listed by the company for all subscribers.

Notice to City prior to rate increases

Three day right to rescind installation order

- * Photo identification on all personnel and subcontractors out in field.
- * Written notice prior to entry of residence
- * Written notice by company to customers before disconnecting service
- * Removal of equipment by company upon service termination
- * Customer telephone calls to company must cost no more than local telephone calls

6.0

OTHER ITEMS:

Bay Cablevision currently does not have a contact person to whom franchise fee payments are made. We recommend that Bay Cablevision send any and all payments to the attention of the City's Finance Director.

According to a letter sent from Mr. Lee Hightower, City of Berkeley, Bay Cablevision may be believed to have overpaid its previous franchise fees by a small amount. Bay Cablevision's Business Manager, Kahlil Habeeb, is not sure

how the City calculated this overpayment. Someone from the City's finance office should contact Mr. Habeeb to explain Mr. Hightower's calculations.

<END OF REPORT - ATTACHMENTS TO FOLLOW>

APPENDIX D-1

CONCEPTS AND DEFINITIONS

A communications need is not a familiar concept in most municipal governments. A forecast of future needs is especially abstract. Therefore, we present a brief discussion of concepts and definitions before interpreting the data.

Berkeley contains many distinct communities or, more precisely, **communities of interest**. For example, one community is interested in promoting local arts and culture, another in promoting job opportunities for young people considered at risk to drug addiction. Any particular organization or individual often participates in dozens of communities of interest.

A community of interest is important to this study because it defines an existing pattern of communications. Most staff members in the City's Office of Economic Development (OED) communicate more with the South Berkeley Development Corporation than with the City's Civic Arts Commission. A study of communication needs must begin with existing communication patterns.

Communications are used for coordinating action, resolving conflict, developing group consensus, cooperating, directing subordinates, reporting conditions, sharing resources and so forth. Communications are essential to organization.

Each community of interest has its own organization. The Arts Community in Berkeley is not as cohesive as the At-Risk-Youth Community. The Arts Community includes a large number of individual artists and many consumer households as well as institutions as disparate as the University of California and the Black Repertory Group. The At-Risk-Youth Community includes a limited number of similarly oriented agencies and a reasonably well defined target population.

Within each community of interest, there are four kinds of communication functions (see definitions in Table 4-1). The mission, activities, participants, resources and organizational characteristics of each community of interest will determine which communication functions are needed now and in the future. The purposes that each communication function accomplishes help clarify the communication need (see Table 4-2).

Berkeley's communities currently pursue each communications function without the use of cable television. Table 4-3 lists some of the conventional means used to satisfy communications functions in the absence of cable television resources.

Telecommunications is the special group of electrical machines that perform some part of the communications process. Telecommunications systems provide capabilities at a price.

Table 4-1
Four Communication Functions

Outreach

Communications directed at the public that provide general information about the community, its mission and services.

Service Delivery

Communications directed at particular clients or constituents as part of satisfying the mission of the community.

Coordination

Communications among the agencies involved in service delivery that concern the administrative and support needs of the community.

Consensus

Communications between the agencies and the clients/constituents or among the clients/constituents for the purpose of developing and expressing political consensus.

Source: W. Siembab, Communications Planning, 1991

Table 4-2
Purposes Of The Communications Functions

Outreach

Increase public visibility, facilitate fund raising, advertise services offered, provide public education, attract clients, improve public image

Service Delivery

Provide client education, conduct transactions, collect and deliver mission oriented information

Coordination

Conduct in-service training, share resources, coordinate programs and activities, provide community administration, share methods and findings

Consensus

Measure opinion, discuss options, rally support, assert advocacy

Source: W. Siembab, Communications Planning, 1991

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Cable television is a particular telecommunications system that provides capabilities for local communications at prices set by the franchisee. The facility is built to comply with the cable franchise as justified by the market conditions. This typically has meant a broadband, trunk and branch architecture (not switched), coaxial cable system which carries up to 50 or so analog video channels. Berkeley's system fits this profile (see Section 2C). These systems can be retrofit to carry data and even voice communications.

While cable television has historically been associated with entertainment programming, Federal law recognizes the tradition unique to cable of public, education and government (PEG) access. This means that facilities and channel capacity can be set aside for the non-commercial communication needs of the general public and of educational institutions and municipal government.

In practice, PEG access uses have followed the capabilities of cable systems built to deliver entertainment to households. Virtually the only communication function that can be satisfied under this arrangement is outreach communications. However, as Table 4-2 and Table 4-3 indicate, local communities need all four communications functions, not just outreach communications. And if PEG access was approached as video communications rather than imitation entertainment programming, demand would exceed the channels made available in most systems.

Table 4-4 shows some of the system design features that would be associated with the four communications functions. A cable system in Berkeley that addressed the range of local communication needs would have a significantly different design than the system in place.

PEG access resources are subsidized by the consumers of entertainment and any other products sold by the cable franchise. Although seldom offered, other products could include security alarm systems or even T-1 circuits in competition with the telephone company. Because of the subsidy, an assessment of community communications needs should look only to those communities that represent the public interest, common good or general welfare. These include those that:

- a. conduct the business of the public sector, e.g., the municipal government
- b. produce the culture and arts of Berkeley's diverse population
- c. conduct the civic education necessary for knowledgeable participation in public decision making
- d. deliver primary, secondary and post-secondary education
- e. protect environmental integrity and quality of life
- f. provide humanitarian services
- g. contribute to the long term economic viability of Berkeley

Cable television franchise renewal will involve a process of public debate. The debate will center on the role that cable will play in Berkeley over the next 15 years. This question centers on the issue of what communication needs the system will meet. The answer to that question will be reflected in the conditions of the franchise agreement and in the design of the cable system upgrade that will most likely follow the franchise renewal.

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Table 4-3
Conventional Means Of Conducting Communications

Outreach

Public service announcements on radio/television, newspaper advertising, newspaper feature articles, 3rd class mail, hand distributed leaflets, bulletin board notices

Service Delivery

On-site visit by client, agency-client telephone call exchange, first class mail, home visit by agency, newsletters via mail

Coordination

Multi-agency meeting at one location, agency-agency telephone call exchange, first class mail, off-site conferences, off-site training

Consensus

Community meetings, newsletters via mail, first class mail, telephone calls to representatives

Table 4-4
Communications Functions, Means Of Cable Communications
And Cable Facility Characteristics

Outreach

Means: Video communications to all households and work places

Facility: Subscriber network passing 100% of households and businesses or combination subscriber network and institutional network

Service Delivery

Means: Video communications to selected community centers and selected households

Facility: Drops to designated community centers, addressable capability, some form of on-demand capability

Coordination

Means: Interactive video communications between multiple community centers and offices, data communications

Facility: Drops to many community centers and offices, addressable capability, two-way video, data circuits

Consensus

Means: Interactive video communications between multiple community centers

Facility: Drops to many community centers, two-way video

Source: W. Siembab, Communications Planning, 1991

Appendix D 2

PUBLIC DOCUMENTS REVIEWED

Proposed Budget Highlights, *1990-91*

Proposed Budget Summary, *1989-90*

Resolution Adopting A Five Year Information Systems Strategy Plan For The City Of Berkeley And Authorizing The City Manager To Issue Request For Proposals, *July 24, 1990*

Information Systems: A Strategy For The City Of Berkeley, *July, 1990*

South Berkeley Area Plan, Draft Final, *January 1990*

The City of Berkeley Master Plan, *1977*

Report on Social and Cultural Resources, *October, 1989*

Issues for the Economic Development Element of the General Plan, *1990*

Revitalization Exchange, *Issues between March, 1989 and May, 1990*

Berkeley Cable Television Task Force

29 July 1989

1

Some ideas

From: Cable Television Task Force & Assessment Sub-committee
per NKBickel

Re: Cable Television in Berkeley
Needs Assessment

To: Communication Support Group

The Task Force wants to know about:

kinds of programming people & organizations would like to see or provide
options for providing community & other access services; esp low cost ones
adequacy of current programming
possible sources of funding for community access services
adequacy of current service—with detailed breakdown
suggested terms of a contract with cable company to protect user & citizen
interests

Sources of lists, names: Library file of community organizations; city clerk mailing
lists for various commissions; business licenses
Publicizing to general public—press releases to: Berkeley Voice, Bay Cable for
showing on ch. 28 bulletin board, Oakland Tribune, Express, Chron., Examiner—will
print meeting listings if get in on time; other? media alliance newsletter? other?

Groups Consultant should meet with
subject to mutual discussion & additions & changes:
Bold indicates essential categories, sub-cats or individual—
Other names suggested are possible examples of cats or people
Underline indicates really good info sources

Category 1: Government

Committee suggests that time proposed in contract to be spent with
departments, department heads be reduced & time added to other outreach
City of Berkeley

City Clerk—re public notice, public meetings, improving
communication with citizens etc.

Public Library—provider, user, possible manager of cable access
Health & Human Services—for own service activities & leads to
community groups; senior centers, health, mental health

Public Safety—re training & communicating to public
Personnel—training programs, communication among staff
Recreation programs, camps

Commissions: cultural, youth & aging, health, mental health, humane, other; we
suggest that Task Force/consultant send them a letter asking them to put a
discussion of access on their agenda & to send the suggestions resulting from that
discussion; if a particular commission expresses great interest, we could schedule
meeting with them

Other government: DHS in Berk, EDD, County Welfare, county library—should we
do anything about contacting? ask city departments that deal with them to comment
on their future role?

Category 2: Educational: schools, universities, institutes

Committee suggests most time to be spent with BUSD, Vista, UC, use Bananas for preschool, afterschools; possibly look for a good single source re institutes, other institutions, school

Berkeley Unified School District:

Superintendent's office

Scott McFarland BUSD 644-6517--gathering cable drop list

Media Center

Other potentially interested school folks should be sought who actually out in schools, Sr., Jr., Elem., Pre & After School Peralta

Colleges

PCTV--Roger Ferragallo &?

Vista-Dr. Barbara Beno, President, v. interested

Merrit, Laney, Alameda, & Peralta Central Admin. boards or chief execs etc to be requested in writing to comment

University of California at Berkeley--

committee suggests that official liaisons Kerner & VP he reports to be asked to bring inreps of certain key institutions or talk to them directed

Lawrence Hall of Science

Pacific Film Archive, University Art Museum

CAL & other university art & film programs, re performances in Zellerbach & other

Kroeber Anthropology Museum

Journalism School--student news program, minority student pgm.

Educational TV & Radio Office Peter Kerner, Director

Library Media Center

institutes & departments

sports departments

Catholic Archdiocese

Grad theological union for institutions associated with it private schools K-12--contact through Headmasters Association;

Bananas as sounding board for pre-school, after school ideas adult special. grad schools, language schools, bus.colleges--

eg Psychotherapy insitute

private institutes

Category 3: Medical & Social services

need to reach potential clients or share knowledge with public

Alta Bates, contact Ms. Gail Radzevich, Director of Public Relations;

Alta Bates has in-house cable system on which educational/instructional tapes for patients play continuously; also maintains videotape loan library for staff eg surgical techniques; Hall of Health—health ed. outreach may close in summer due to budget cuts

nursing homes, adult day care centers—do they have an organization to tap into?

incl City Health & Mental Health, Sr. Centers; homeless programs; get further contact suggestions from them

Some Suggestions:

John Martin, Stiles Hall, David Stark, Stiles anti-racism pgm & from him: Javane Strong, school drug & alcohol prevention program 644-6070;

Sandy Demit-540-4475, seniors resource library;

Susan Ryan, Dir., N Berk Senior Center, 644-6107;

Adelante 549-0232;

Berk Asian Youth Group, David Takakishiba, 849-4898;

outreach groups to recent asian immigrants?;

Pacific Center (gay & lesbian) 841-6224;

Young Adult Project, Phil Cotton, Dir, 644-6226; Brian, S. Berk YMCA 843-4280

Center for Independent Living;

Alcoholics Anonymous;

Free Clinic ; drop in center--Sally Zinman; Daily Bread-Carolyn North 848-3522;

battered women's center; rape crisis center

HOT LINES—rape, child abuse, alcoholism, suicide; talk to one

Category 4 Business Community

official letter, get on agenda?

but how reach those who dont belong, identify with CC & others?

Chamber of Commerce,

Telegraph, West Berkeley, Downtown, College Ave. Solano, Vine/Shattuck, San Pablo and other neighborhood merchant associations

businesswomen's, realtors, rotary, lions etc orgs ano. possible route

computer & info related industries--check with Palo Alto advanced services

committee for their report developed re PA proposal

PGE, Pac Bell, Banks, Realtors--other big established businesses that might become funding sources, be interested in insitutional loops

bookstores esp that do poetry readings, author vists; black oak, cody's mama bears, gaia

hotels--interest in community calendars, events promos, other

Entertainment-related industry--big & small

Fantasy records & films--ask Mal Bernstein, their lawyer, how to approach (see Sean)

big & small music, film, video production companies, writers, technical people--see following

Category 5: film, television community in Berkeley & Bay Area

-how reach? NFCPL Nat. Fed. of Local Community Programmers; &/or through zip coded labels from one or more of following David Bolt, Exec, Dir., Bay Area Video Coalition 861-3282; Film Arts Foundation, SF, Media Alliance, SF; East Bay Media Center, other?; Les Blank Flower Films EC 525-0942 Jeff Rivers in charge of minorities in journalism program at ucb 642-5962; Martha & Lex Nicoloff Nemcik or Lee Felsenstein of Community Memory Project about computer interface

Category 6: Arts & Culture

arts groups, performing ; performance centers

ask Susan Felix, Berkeley Arts Commiss. 549-3361; Mimi Roberts, former chair of commission; Ken Ingram former city arts staffer 644-6080

Berk Rep.,

Philharmonia Baroque,

Berk. Symphony,

Berk. Opera,

Berk. Black Rep.,

ballet,

Julia Morgan Theater,

La Pena,

Western Jewish Theater,

classical musicians—Laurette Goldberg 524-1685 & pals doing performances & classes on ancient instruments; ; 1711 Arch St.,

folk, pop, rock etc.

Freight & Salvage, Ashkenaz

dance;studios?

painting, printmaking, sculpture; ask Bonnie Grossman, Ames Gallery of Am. Folk Art 845-4949 (ran KQED art auction for years);

Artworks Foundry & Gallery 5644-2735;

Kala institute Gallery 549-2977 (printmaking studio),

crafts:

weaving studio on san pablo& needlepoint,knitting, weaving centers, straw into gold on San Pablo;

potters studios that run xmas open houses;

Coop Arts Center on Shattuck

is there a single organization that all these folks belong to?

reach through—ProArts 763-7880? Bay Area Lawyers for the Arts?

cultural organizations:

Berk. Historical Society has or has access to big collection of films & tapes ; galleries & schools—Rotary Art Center in Live Oak Park,

Category 7: Civic and Religious

ethnic & language minority communities/groups:

NAACP,

black womens orgs.

100 black men. Berkeley Black Men United for Change,

black churches,

asian orgs, churches;

hispanic church & cultural orgs.,

native americans;

ethnic language groups, other?

civic & social clubs & organizations

League of Women Voters, Pat Wadleigh, President, 848-7054, or Jane Bergen 848-3954, office #843-8824, 1836 University. 94703

YMCA,

YWCA,

Stiles Hall (former Univ. YMCA)

University YWCA

Girl/Boy Scouts

Campfire

Women's Town Council--an organiz. of traditional womens orgs, holds monthly meetings with speakers, possible place for outreach

Rotary, Lions

women's business groups, realtors & women realtors,

neighborhood groups through Council of Neighborhood Organizations

Toastmasters, etc.

University Faculty Wives Section Clubs esp. help for foreign students etc

Grey Panthers, AARP

Am. Legion, Vets of Foreign Wars, Veitnam Vets--offices in veterans mem. bldg?

hobby & interest organizations eg bridge, chess

amateur sports leagues eg adult baseball, kids soccer

churches etc:

christian

jewish, esp. Richmond/Berkeley Jewish Community Center

buddist, hindu, muslim, other spiritual, cultural groups eg Shared Visions

(shamanism) Wilnafki

Group 8: Activist & Political Groups

political groups & organizations—balanced selection from polit spectrum: Berkley Democratic Club, Berkeley Citizen Action; Democrats, Republicans, Libertarians, Rainbow Coalition, Peace & Freedom, CISPIS, Nicaragua Info Center, Neighbor to Neighbor, Africa Resource Center

Labor unions—

thru Alameda County Central Labor Council, thru UC, BUSD & city unions?

Environmental groups:

Ecology Center,

Bio-integral Center,

Sierra Club,

Citizens for a Better Environment Berk. Office, other?

THE FUTURE OF CABLE TV IN BERKELEY

• Free Public Workshop •

Saturday, April 7th

1:00 - 4:00 p.m.

North Berkeley Senior Center

1901 Hearst Ave.

(corner of Martin Luther King Jr. Way)

Turn over for details →

In 1991, the City of Berkeley's contract with Bay Cablevision to provide cable television service to the citizens of Berkeley will expire. Prior to renewing this contract, the City wants to assess Bay Cablevision's past performance as well as determine the community's future needs for such cable television services as community programming, two-way communications, video production training and other services that cable television can provide.

This April 7th workshop is YOUR opportunity to learn how cable television operates in other communities around the country and to voice your opinion on the kind of cable television service Berkeley has had or should have in the future.

The cable television service contract that the City will soon negotiate for will be in effect for the next ten to fifteen years. NOW is the time for you to have your say in what that contract includes.

For more information about this workshop or about the City of Berkeley's cable television franchise renewal process or timetable, call Jeff Baker, Berkeley Public Works Department, at 644-6218.

COMMUNICATIONS SUPPORT CORP.

P.O. BOX 10968 • SANTA ANA, CA 92711-0968

SANTA ANA (714) 836-6280
MISSION VIEJO (714) 364-3191

Kris Welch
KPFA
2207 Shattuck Ave.
Berkeley, CA. 94704

March 20, 1990


Dear Kris,

The City of Berkeley's 20+ year contract with the company that provides cable television service to Berkeley (Bay Cablevision) will expire next year. The City has hired me, as part of a team of consultants, to undertake a process of community education and needs assessment to determine what kinds of non-entertainment cable tv services organizations and individuals in Berkeley might use and benefit from (e.g. public and municipal access channels and programming, community calendar channels, video production training and facilities, etc.). We are also looking at citizens' satisfaction (or lack thereof) with the cable service they have received in the past. Under federal law, Berkeley must be able to demonstrate that there is a "need and desire" for whatever kinds of services it requires from Bay Cablevision (or any other cable operator) in its next contract.

As part of the City's needs assessment process, we are holding a public workshop on the future of cable tv in Berkeley on April 7th. Since the turnout at this event will have a fair amount of influence on how strong the City's negotiating position will be when it sits down with the cable operator next year, we are trying to let as many people as possible know about it and about the refranchising process in general. Philip Maldari suggested that you might be willing to have me and a member of the City's Cable Television Commission appear as guests on your show prior to April 7 to let people know what's going on. Would this be possible?

I can be reached at 652-0519. I very much hope we can work something out and look forward to hearing from you.

Best regards,



Harriet Moss

CONSULTANT AND CABLE TV TASK FORCE VICE_CHAIR APPEARED ON "THE MORNING SHOW"
ON APRIL 3, 1990

City of Berkeley



Martin Luther King, Jr.
Civic Center Building
2180 Milvia Street
Berkeley, California 94704

(415) 644-6580

TO: CITY COUNCILMEMBERS
FROM: MAYOR HANCOCK'S OFFICE
RE: APRIL 7TH "FUTURE OF CABLE TV IN BERKELEY" PUBLIC WORKSHOP

Background

In August 1991, Berkeley's franchise with Bay Cablevision will expire. Under the federal 1984 Cable Act, before the City can negotiate a new contract with Bay Cablevision or any other cable operator, it must find out what the Berkeley community thinks of the cable tv service it has been receiving. The City also must find out what kinds of needs and desires the community has - or will have in the future - for cable television services. In order to glean this information, the City has hired the consulting firm of Communications Support Corporation to undertake a number of studies. These include an engineering study of the current cable tv system, a review of Bay Cablevision's customer service operations, a financial analysis of the system and a community-wide needs assessment designed to educate Berkeley citizens and organizations about community uses of cable television and to determine what kinds of community uses (such as public access channels, production training and equipment, two-way capacity, etc.) are needed and desired in Berkeley.

Public Workshop

As part of this community needs assessment, the City will be sponsoring a free public workshop, "The Future of Cable TV in Berkeley" on Saturday, April 7th at the North Berkeley Senior Center from 1 to 4pm (see attached notice). The workshop will feature examples of community programming from around the state, a presentation on Berkeley's cable refranchising process, a demonstration of how to tape a PSA, and group discussions on how cable tv can serve the needs of the Berkeley community. All Councilmembers are encouraged to attend, both to learn what kinds of uses other communities make of their cable television systems and to hear what future cable services Berkeley residents desire.



City of Berkeley



City Manager's Office
Martin Luther King, Jr.
Civic Center Building
2180 Milvia Street
Berkeley, California 94704

(415) 644-6580

TO: ALL COMMISSION SECRETARIES
FROM: COMMUNICATIONS SUPPORT CORP., the City's cable
television consultants
RE: BERKELEY'S CABLE TELEVISION REFRANCHISING PROCESS.
Please put this on your next agenda.

Commissioners:

We need your ideas!

Communities across the country are using their local cable television system as a community resource for such services as community programming, two-way video and data communications, and video production training. In August 1991, Berkeley's franchise with Bay Cablevision (the City's current franchisee) will expire. Under federal law, before the City can negotiate a new contract with Bay Cablevision or another cable operator, it must find out what the community thinks of the service it has received. The City also must find out what kinds of needs and desires the community has - or will have in the future - for cable services.

To this end, the City will hold a free public workshop on cable television and its future in Berkeley on April 7th, 1 to 4pm at the North Berkeley Senior Center, 1901 Hearst. The history of cable tv, how other cities use cable, how Berkeley's franchise review process works, and a demonstration of how to produce a public service announcement will be covered. Samples of community programming from around the country will be shown, demonstrations of video production equipment will be available, and attendees will have the opportunity to comment upon their or their organization's current and future cable-related needs.

The cable television contract that the City will soon negotiate will be in effect for the next fifteen years. This workshop is YOUR chance to influence the future of cable tv in Berkeley. For more information about the workshop or Berkeley's franchise review process, or to express your thoughts on this subject, write or call: Jeff Baker, City Hall, 2180 Milvia Street, Berkeley, CA. 94704, 644-6218.

Cable television could play an exciting role in our community.
It's partly up to you!



COMMUNICATIONS SUPPORT CORP.

P.O. BOX 10968 • SANTA ANA, CA 92711-0968

SANTA ANA (714) 836-6280
MISSION VIEJO (714) 364-3191

Councilmember
City Hall
2180 Milvia Street
Berkeley, CA. 94704

November 15, 1989

Dear Councilmember,

In August 1991, the City of Berkeley's cable television franchise with Bay Cablevision expires. The City has retained Communications Support Corporation to provide technical assistance with the City's cable television franchise renewal proceedings. This assistance consists of a set of studies, including financial analysis of the franchise, review of Bay Cablevision's customer service record, evaluation of the technical condition of the system, and determination of the community's needs for various kinds of services potentially provided by cable television.

Bay Cablevision is obligated under the federal Cable Television Policy Act of 1984 to provide Berkeley with a franchise renewal proposal that meets the future cable-related needs and interests of the Berkeley community, taking into account the cost of doing so. Determination of these needs and interests is, therefore, a key component of the City's preparation for franchise renewal discussions.

If you have any thoughts or questions about the franchise renewal process or suggestions for community organizations or particular individuals to contact regarding Berkeley's cable-related needs, please contact Harriet Moss, the Needs Assessment Coordinator, at (415) 652-0519 or feel free to contact me at (213) 649-6326. I look forward to receiving your comments.

Sincerely,

Wally Siembab
Project Manager
Communications Support Corporation

CITY OF BERKELEY

Loni Hancock
MAYOR

Dear Community Leader:

You are cordially invited to attend a free public workshop on cable television and its future in Berkeley:

CABLE TELEVISION COMMUNITY WORKSHOP
Saturday, April 7, 1990
1:00-4:00 p.m.
North Berkeley Senior Center
1901 Hearst (corner of Martin Luther King, Jr. Way)

The history of cable, how other cities use it, and the review process for the cable franchise will be addressed. There will also be demonstrations of video production equipment and the production of public service announcements. This is an opportunity to learn how your organization can benefit from this powerful medium and to influence the future of cable television in the City of Berkeley.

In August, 1991, Berkeley's cable franchise with Bay Cablevision will expire. Under federal law, before the City negotiates a new contract with them or anyone else, it must find out what the community thinks of the service it has received. The City also needs to know what kinds of services the community needs now and in the future.

Cable TV is an important community resource, and its potential as an innovative communication medium is great. Across the country communities have used their local cable television system to increase political discourse and improve education. For example:

- o In Madison, City Council meetings are carried on cable, with follow-up live call-ins.
- o In Irvine, students use a live phone-in "homework assistance project" to get on-the-air tutoring.
- o In Reading, PA, the City's senior centers and high schools are connected via two-way cable, allowing education and debate on split-screens--across generations.

Your ideas will shape Cable TV's future in Berkeley.

The workshop is free of charge, but space is limited. Participation will be on a first come, first served basis. There will be registration at the door, but to reserve a space for yourself or your organization, please return the form below.

Martin Luther King Jr. Civic Center 2180 Milvia Street Berkeley, California 94704

Telephone (415) 644-6484
TDD (415) 644-6915

385

If you have any questions or would like to be informed of future public hearings, please contact Jeff Baker, Public Works Department, Civic Center Building, 2180 Milvia, Berkeley 94704, (415) 644-6218.

Sincerely,

Loni Hancock

Loni Hancock
Mayor

MAIL TO: JEFF BAKER, PUBLIC WORKS
CITY OF BERKELEY
2180 MILVIA STREET
BERKELEY, CA 94704

PLEASE RESERVE _____ SPACES AT THE APRIL 7 CABLE TELEVISION WORKSHOP

ORGANIZATION NAME: _____

MAILING ADDRESS: _____

CONTACT PERSON: _____ PHONE: _____

NAMES/TITLES OF INDIVIDUALS ATTENDING:

COMMUNICATIONS SUPPORT CORP.

P.O. BOX 10968 • SANTA ANA, CA 92711-0968

SANTA ANA (714) 836-6280
MISSION VIEJO (714) 364-3191

Ginny Z. Berson
KPFA
2207 Shattuck Ave.
Berkeley, CA. 94704

February 8, 1990

Dear Ginny,

Thanks for your help today with getting KPFA's paid/nonpaid staff mailing list labels. Here is the copy that I'd like to submit for your March Programmers Memo:

CABLE TV WORKSHOP

Communities across the country are using their local cable television system as a community resource for such services as community programming, two-way video and data communications, and video production training. In August 1991, Berkeley's franchise with Bay Cablevision (the City's current franchisee) will expire. Under federal law, before the City can negotiate a new contract with Bay Cablevision or another cable operator, it must find out what the community thinks of the service it has received. The City also must find out what kinds of needs and desires the community has - or will have in the future - for cable services.

To this end, the City will hold a free public workshop on cable television and its future in Berkeley on April 7th, 1 to 4pm at the North Berkeley Senior Center, 1901 Hearst. The history of cable tv, how other cities use cable, how Berkeley's franchise review process works, and a demonstration of how to produce a public service announcement will be covered. Samples of community programming from around the country will be shown, demonstrations of video production equipment will be available, and attendees will have the opportunity to comment upon their or their organization's current and future cable-related needs.

The cable television contract that the City will soon negotiate will be in effect for the next fifteen years. This workshop is YOUR chance to influence the future of cable tv in Berkeley. For more information about the workshop or Berkeley's franchise review process, or to express your thoughts on this subject, write or call: Jeff Baker, City Hall, 2180 Milvia Street, Berkeley, CA. 94704, 644-6218.

Thanks, Ginny, and if you have any questions about this, please give me a call at 652-0519.

Best,


Harriet Moss

SOUTH and WEST BERKELEY REVITALIZATION EXCHANGE



A LINK BETWEEN THE
COMMUNITY AND THE CITY

VOL. 4, NO. 8

APRIL 1990

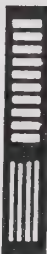
THE FUTURE OF CABLE TV IN BERKELEY

• Free Public Workshop •

Saturday, April 7th

1:00 - 4:00 p.m.

North Berkeley Senior Center
1901 Hearst Ave.
(corner of Martin Luther King Jr. Way)



In 1991, the City of Berkeley's contract with Bay Cablevision to provide cable television service to the citizens of Berkeley will expire. Prior to renewing this contract, the City wants to assess Bay Cablevision's past performance as well as determine the community's future needs for such cable television services as community programming, two-way communications, video production training and other services that cable television can provide.

This April 7th workshop is YOUR opportunity to learn how cable television operates in other communities around the country and to voice your opinion on the kind of cable television service Berkeley has had or should have in the future.

The cable television service contract that the City will soon negotiate for will be in effect for the next ten to fifteen years. NOW is the time for you to have your say in what that contract includes.

For more information about this workshop or about the City of Berkeley's cable television franchise renewal process or timetable, call Jeff Baker, Berkeley Public Works Department, at 644-6218.



TV HOST

March 1990

Monthly [®]

Everyone's Favorite
WORKING GIRL



**Melanie
Griffith**

**Talks About Love,
Happiness And
Success**



Dear Subscriber:

We at Bay Cablevision, in an effort to protect you from a potential problem, are posting this notice.

It has been brought to our attention that there have been unauthorized people posing as Bay Cablevision employees installing illegal cable. This is a criminal act and steps are being taken to prosecute these criminals to the full extent of the law.

Whenever you must conduct business with Bay Cablevision and a technician has to come to your home, please verify the technician's employment. All you need to do is ask for the person's photographic identification badge and check the truck for the red Bay Cablevision company logo on the side. If you still have some doubts, have the technician wait outside and call our office at 232-1238 to clear the person through our management.

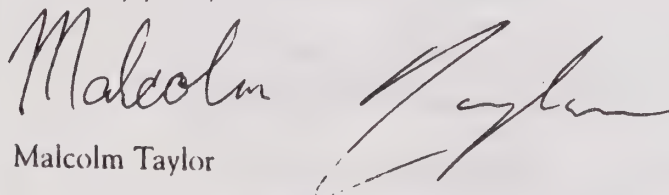
Thank you for your help in clearing up this very annoying matter.

We are happy to announce that we have launched VJN — The Video Jukebox Network. VJN is the first interactive video program for Bay Cablevision. VJN lets you bring the music video of your choice right into your home by accessing a 900 number. For more details about The Video Jukebox Network, call our customer service line.

Also, we welcome the Pacific Sports Network to our basic line up. PSN covers a variety of West Coast regional sports. We've listened to the many requests of sports alumni and fans in the East Bay who have let us know just how important regional sports can be to a community.

See you in April!

Sincerely yours,


Malcolm Taylor

For Berkeley Subscribers:

Your Ideas Will Shape Cable TV's Future!

Communities across the country use their local cable television system as a community resource. In Madison, the City Council, and many other important meetings are carried on cable, with follow-up call-in shows. In Irvine, students use a live phone-in "Homework Assistance Project" to get on-the-air tutoring. In Reading, PA, the City's senior centers and high schools are connected via two-way cable, allowing education and debate on split-screens — across the generations!

In August 1991 Berkeley's cable franchise with Bay Cablevision will expire. Under federal law, before the city negotiates a new contract with them, or anyone else, it must find out what the community thinks of the service it has received. The city also needs to know what kinds of needs and desires the community has — or will have in the future — for services.

To help find out, the city will hold a free public workshop on cable television and its future in Berkeley on **April 7th, 1 to 4 p.m. at the North Berkeley Senior Center, 1901 Hearst.** The history of cable, how other cities use it, how our franchise review process works and a demonstration of how to produce a public service announcement will be covered. The city will also hold one or more public hearings and **your comments are welcome by mail or phone to: Jeff Baker, City Hall, 2180 Milvia, Berkeley CA 94704, (415) 644-6218.** Call this number for more information on the workshop and hearings too. **Cable television could play an exciting role in our community life. It's partly up to you.**

BERKELEY VOICE

VOLUME 8, NUMBER 25

THURSDAY, APRIL 5, 1990

THE COMMUNITY NEWSPAPER OF BERKELEY

Cable TV Workshop Slated For Saturday

□ 'Local access' television could
be a reality by August of next year

By Shelia Farrell

The Voice

The question of whether or not Berkeley will have a local access station starting in August 1991 may well be decided by response to a community survey undertaken by city consultant Kathleen Sciuler. Federal law requires that the city conduct a study, and an informational workshop will be held on Saturday from 1-4 p.m. at the North Berkeley Senior Center.

When asked whether or not she feared an unruly mob at the workshop, Schuler replied, "My nightmare is six. If there are a hundred noisy people there, I'll be glad; if hardly anybody shows up, it will be bad."

When the city's contract with Bay Cablevision expires in August of 1991, Berkeley must decide if it

wants a station.

It's a big-money question: Berkeley stands to receive a small fraction of the current 3 million annual revenues if it opts for no station, and to have a financial liability and a whole new administrative and political football if it chooses to have one.

Here is an overview of the situation.

The Players

1. Federal Communications Commission (FCC) — which makes rules and sets standards. Legislation is pending which could change all the rules within the year, and re-regulate the city's relationships with the cable companies.

Cable TV...

Continued from front page

2. Berkeley — which needs to negotiate the contract, select one or more operators, or elect to run the facility as a municipally owned company. The city can negotiate terms with a new vendor or with the old one. Assistant City Manager Sean Gordon is currently involved in coordinating the city's effort to prepare for the negotiation. He is in touch with the battery of consultants the city has hired, and the task force which has been selected by the City Council to gather information.

3. Lenfest — which operates locally as Bay Cablevision. The powerful Tele-Communications Inc., known as TCI, used to hold the franchise for Berkeley, but sold off 52 percent of it to Lenfest in 1986. TCI's head, John C. Malone, is known as the most powerful man in television; since TCI owns stock in Lenfest, Malone is the granddaddy, if not godfather, of this agency.

Nevertheless, service has improved since Lenfest took over, and it is quite possible that they could provide the best deal for Berkeley in 1991 if Berkeley negotiates well.

4. The subscribers — which currently number 11,800. Berkeley has approximately 30 percent of its public on cable, compared to the national average of 56 percent. This low figure is attributed in part to a large student population, and in part to the fact that we do not have universal feeds, reaching the entire community.

Subscribers — largely middle- and low-income households — pay about \$11 or more, depending on the options they elect, such as MTV or sports.

5. Potential users of the system — who would provide programming, are often broken down into the categories called PEG (public, education and government): public access (individuals and community organizations such as Center for Independent Living); education (a closed meeting including UC-Berkeley, Berkeley Schools and Vista College will be held on April 10); government (the city of Berkeley and any one of the many federal, state or county agencies which might have an interest).

6. Local producers and organizations — who would like to get the contract for running a station. One option is for the city to avoid having an actual studio, and provide grants whereby individuals and organizations can rent existing facilities to create programming. A local station might generate about 12 jobs.

Perhaps the most important point on the entire issue was made by Harriet Moss, cable TV consultant for the city of Berkeley.

"The match that lights the fire under me," she explained, "is that by the year 2000, five or six companies will control all of the media.

"Public access is our only chance to have an alternative. Public access is a fluke. It's our only window of opportunity."

A studio can have the finest facilities in the world, but if there is no good programming ready to be shown, the station will not succeed. That's why the sequence of concerns begins with the assessment of community needs, and the education of the public as to the possibilities involved.

So the task facing the city is awesome. We have a wide spectrum of political viewpoints, plus a tradition of splintering various factions.

It will be interesting to see whether the process goes smoothly or not, and whether, as Schuler hopes, "decisions about what we need and how we use it will flow out of the community's needs."

Footnote: The *Voice* reader questions on this topic yielded one very well thought-out response from Robert Solley. He pointed out that it need not be a forced choice between Berkeley providing funds or a building to support a station, and that both were possible.

Solley characterized the current service by Bay Cablevision as "woefully inadequate, and unresponsive to community needs." In this article I hope to have clarified some relevant questions he raised as to the status and possibilities regarding our current vendor. Thanks, Mr. Solley.

CITY OF BERKELEY

1990 Spring Report

City Plans For Cable TV

The question is how to best use Berkeley's access to cable tv. Hundreds of communities across the country are using cable television's extensive channel capacity, two-way communications potential, and the relatively low cost of modern video production equipment as a community information source. For example:

- In Madison, WI, the City uses the government access channel on its cable tv system to broadcast Council and Commission meetings, provide call-in shows for public officials, and disseminate information about the programs of public agencies.

- In Irvine, CA, the school district uses a cable channel for its "Homework Assistance Project" in which tutors illustrate the solutions to homework questions phoned in by students.

- In Mountain View, CA, all city buildings are connected via a two-way cable television line for data and video

communications, enabling the city to transmit data more quickly and inexpensively and allowing city departments with facilities at more than one location (like the fire department) to cablecast training videos to all locations simultaneously.

- In Pasadena, CA; Boston, MA; Austin, TX; Portland, OR, and in many other towns and cities too numerous to mention, community access centers provide equipment, technical assistance and training to the public, enabling citizens and community organizations to produce and cablecast 1000's of hours of community programming on every subject imaginable. In these communities cable television plays the role of an electronic newspaper, soapbox, and bulletin board.

These imaginative uses prove that cable tv can provide much more to the community than just entertainment. Interesting, but what does this have to do with you?

Bay Cablevision Contract To End

In August 1991, Berkeley's 15-year contract with Bay Cablevision, the cable tv company providing service to Berkeley residents, runs out. Under federal law, before the City negotiates a new 10-15 year contract, it must undertake a **COMMUNITY SURVEY** to find out what the community thinks of the current service and, more important, what kinds of needs and desires the community has or will have in the future for nonentertainment services.

Experience in many communities has proved that the best way to determine this information is by educating their citizens on the way other cities use cable tv before trying to assess how their own community might use it. To this end, the City will be sponsoring a **FREE PUBLIC WORKSHOP on Saturday, April 7, 1990, from 1-4 PM**. The workshop will cover the his-

tory of community programming, how other communities use cable tv, and how Berkeley's contract renewal process will work. Community organizations throughout Berkeley will be contacted to discuss how cable tv might play a beneficial role in the organization's work and in the community as a whole. Once this survey is completed, it will form the basis for the City's next contract for cable tv services.

In short, cable tv could play an important role in the cultural, economic, and community life of Berkeley. Whether it does or not depends on your interest and participation in the assessment process. For information call Jeff Baker, Public Works Department, 644-6218.

*Street Cleaning Survey
on page 3*

City slates hearing on contract for cable TV

By Sheila Farrell

The Voice

The front page of the *City of Berkeley 1990 Spring Report* has an article entitled, "City plans for cable TV." Since Berkeley's 15-year contract with Bay Cablevision ends in August of 1991, the city is legally required to review current service and find out what needs and desires the community has or will have for future "non-entertainment" services.

To this end, the city has scheduled a hearing/workshop to begin airing the deluge of ideas which this project is certain to release. The hearing is April 7 at the North Berkeley Senior Center, 1901 Hearst, from 1-4 p.m.

The workshop's purpose is to review the history and precedents of community programming, as well as the complicated process of renewing the city's cable TV contract with the vendor.

Before the hearing, the *Voice* will give an overview of the many choices and priorities that both citizens and city council will need to consider. But already, certain topics are important. Below is a list of questions which give an idea of the various possibilities.

If you drop/mail your answers in/to the *Voice* mailbox at 2936 Domingo, 97405, by March 31, we will include your views in the next article. If not, perhaps the questions will help you sort out your thoughts before the hearing.

Please mark each item as follows: H for high priority, M for medium priority, and L for lowest priority.

1. Berkeley should spend money to supplement the vendor budget so as to have the finest facility possible.

2. Berkeley should offer the vendor free space to upgrade the facility, without spending money.

3. Trucks for shooting video in the community are more important than sophisticated studio cameras and space.

4. Editing suites for a variety of formats should be available.

5. Liasons in city schools should bring cable TV into the schools.

6. In addition to city council meetings, there should be a council digest and coverage of the smaller commissions.

7. The many arts and entertainment activities in Berkeley should be reviewed.

8. The many non-profit and governmental programs should be given priority.

9. Personal computer tie-ins to banks and utilities should be implemented.

10. The system should be used for inter-city communications.

COUNCIL OF NEIGHBORHOOD ASSOCIATIONS

CNA*To Let Neighborhoods Know What's Coming Down Before It Lands On Them*

The Council of Neighborhood Associations • Berkeley, California

BETTER USE OF CABLE TV IN BERKELEY?

"In August 1991, Berkeley's cable franchise with Bay Cablevision will expire. Under federal law, before the city negotiates a new contract with them or anyone else, it must find out what the community thinks of the service it has received. The city also needs to know what kinds of services the community needs now and in the future."

That's what Mayor Hancock says in her invitation to all citizens to attend the April 7 Cable Television Community Workshop. You might notice that she did not say the city wants to know what you think about the content or the cost of the cable services. And for good reason. The Cable and Communications Policy Act of 1984 forbids cities to bring up such subjects any more, once a carrier has been issued a franchise.

You are allowed to talk about service. The Act allows a city to negotiate "reasonable access" for public, educational and governmental

local programming. Congress has begun to wonder if it gave away the shop to the cable industry in 1984, and is currently holding hearings to decide if it should restore some negotiating rights to cities and/or have stricter national legislation. You can catch some of these hearings on C-Span. The House of Representatives says they hope to have new legislation by the end of the year. Don't hold your breath.

Among many questions that need to be addressed now are the following:

- Is Channel 28 sufficient?
- Should Bay Cablevision provide a fully-equipped studio for local programming?
- Can Berkeley (afford to) televise Council meetings?
- If your area undergrounds its electric cables, might you lose your cable access?
- Does BC need to open a Berkeley office? (They currently have offices in El Cerrito and Richmond.)
- Have they finally installed enough phones for your call to get through?
- Do they correct the faults you report in reasonable time?
- What new, innovative ways can our community use our cable service?

Come to the Free—CABLE TV COMMUNITY WORKSHOP, Saturday, April 7, 1-to-4 pm., North Berkeley Senior Center, 1901 Hearst.

—Victor Herbert

My name is Loni Hancock and I'm the Mayor of Berkeley. Berkeley's 20-year contract with Bay Cablevision to provide cable television service to the residents of Berkeley is about to expire. Before the City negotiates a new contract for cable television service, we want to hear from you, the citizens of Berkeley, about how you've liked Bay Cablevision's service in the past. We'd also like to hear from you about future services you'd like to have available, such as public access facilities and channels, telecourses for college credit, community calendar channels, or anything else you can think of. Please call 622-6218 or send your written comments to me, at the Mayor's office at Berkeley City Hall. Thank you.

TEXT OF PUBLIC SERVICE ANNOUNCEMENT MADE BY MAYOR HANCOCK AT APRIL 7th COMMUNITY WORKSHOP AS AN EXAMPLE OF HOW TO PRODUCE A PSA. THIS PSA WAS SUBSEQUENTLY RUN ON CHANNEL 28.

FOR IMMEDIATE RELEASE
CONTACT: HARRIET MOSS (415) 652-0519

FUTURE OF CABLE TV IN BERKELEY: FREE PUBLIC WORKSHOP

Communities across the country are using their local cable television systems as a community resource for such services as community programming, two-way video and data communications, and video production training.

* In Madison, Wisconsin, City Council and other government meetings are carried live on cable, with follow-up call-in shows.

* In Irvine, California, students use a live phone-in "Homework Assistance Project to get on-air tutoring.

* In Reading, Pennsylvania, the City's senior centers and high schools are connected via two-way cable tv, allowing education and debate on split screens -- across the generations!

In August 1991, Berkeley's franchise with Bay Cablevision, the City's current cable television provider, will expire. Under federal law, before the City can negotiate a new contract with Bay Cablevision or any other cable operator, it must find out what the community thinks of the service it has received. The City also must determine what kinds of needs and desires the community has - or will have in the future - for cable television services.

To help find out, the City will hold a free public workshop on cable television and its future in Berkeley on April 7th, 1 to 4pm at the North Berkeley Senior Center, 1901 Hearst. The history of cable tv, how other cities use cable, how Berkeley's franchise review process works, and a demonstration of how to produce a public service announcement will be covered. Samples of community programming from around the country will be shown, demonstrations of video production equipment will be available, and attendees will have the opportunity to comment upon their or their organization's current and future cable-related needs.

The cable television contract that the City will soon negotiate will be in effect for the next fifteen years. This workshop is the public's chance to influence the future of cable tv in Berkeley. For more information about the workshop or Berkeley's franchise review process, or to express your thoughts on this subject, write or call: Jeff Baker, City Hall, 2180 Milvia Street, Berkeley, CA. 94704, 644-6218.

-----end-----

CITY OF BERKELEY • CITY MANAGER'S OFFICE
2180 MILVIA STREET BERKELEY, CA. 94704

EXPRESS

■ The East Bay's Free Weekly

■ May 18, 1990 ■ Volume 12, No. 32

*Is Berkeley
fighting for
position in
a challenging
new high-tech
Information Age,*

TOWN & TUBE

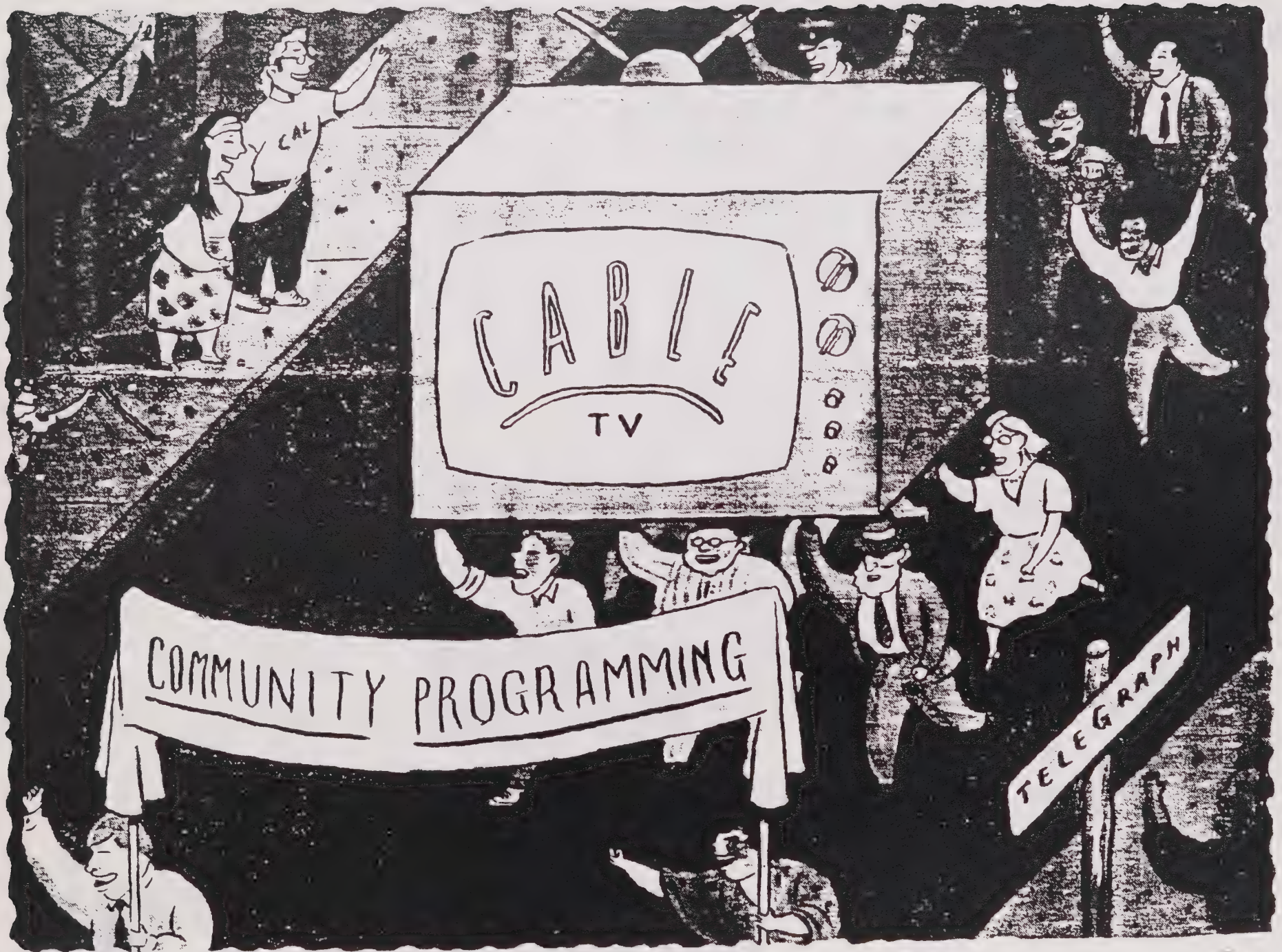
*or
is it
just
renegotiating
its cable TV
contract?*

"Cable TV
is probably the
most effective tool a
city can have to get
information out to its
citizenry. Some cities
actually recognize
this fact..."

Illustration by Ad McCauley

By Mike McGrath

In August, 1991, the city of Berkeley will have an opportunity to enter the Information Age—at least that part of it represented by state of the art cable TV. While you might think that any city with as many techies, computer hackers, and independent video producers as Berkeley would already have a leg up on cable possibilities, you would be wrong. When it comes to community access cable television, progressive Berkeley is way behind any number of staid suburban communities. Live broadcasts of city council meetings, community college "tele-courses," locally produced and aired videos: these are things that people in communities like Mountain View or Santa Ana take for granted, while in



CABLE

Berkeley they are only tantalizing possibilities.

Next year, Berkeley's franchise with Bay Cablevision, the Richmond-based cable company that operates the city's system, will come up for renewal for the first time in many years. Although the federal Cable Act of 1984 gives the company what is often referred to as a "presumption of renewal" of what is practically speaking a local monopoly, the city may ask the company for certain things: reserved channels for local cablecasting of community, educational, or government programming, video production equipment and facilities, and a franchise fee of up to five percent of the system's annual gross receipts. If the city can show that the company has not provided reasonable service to both the customers and to the community, renewal can be denied.

In order to prepare for the upcoming negotiations, the city has hired three consultants to perform what is known as a "needs assessment" study. Consultant Harriet Moss explained it to me. "The city needs to go to its citizens and say, 'What do you think of the cable service over the past fifteen years, and what kinds of uses do you think you will need in the next twenty years?' Now that's a difficult thing to do. It's very hard for people to know about something they've never seen. A few people we've talked to have lived in other cities, or they've used public access channels in other towns in the Bay Area, like Walnut Creek, so they know what we're talking about. With other people you have to start from zero; you have to educate them as to what happens in other communities across the country."

During the past few months, Moss and her two fellow consultants, Kathleen



Kathleen Schuler

Schuler and Wally Simbab, have been making the rounds of community organizations, arts groups, educational institu-

tions, and government agencies, conducting interviews and assembling "focus groups" in an attempt to determine the

By Chris Dufley

"Wake up! Video is a huge monster power and you better learn how to use it, and you better learn how other people use it, especially if there are going to be only six other people controlling everything you get, information-wise."

city's cable video needs. In April, the consultants, along with the City Council's cable television task force, held a workshop at the North Berkeley Senior Center, inviting members of the public to come, ask questions, and talk about what they wanted to see in Berkeley's video future.

"Cable television," Moss had previously told me, "is probably the most effective tool a city can have to get information out to its citizenry. Some cities actually recognize this fact and use cable exceedingly well. You've got a box of tools at your disposal. You've got teleconferencing, where you're just sending audio and video back and forth, you've got public access, and you've got municipal access."

"One of the really easy and useful uses of cable TV, particularly in Berkeley where there is no daily paper, is text calendars. You have a character generator or computer at one end, and what you are doing is simply typing information into the system, and it comes out on a TV set as text: 'Street cleaning for neighborhoods between this street and that street is such and such and such a time.' Or, 'Don't forget, your recycling gets picked up on Tuesday.' The recycling center down on Gilman, they're in the process of changing from a monthly schedule to

CABLE

a weekly pick-up and they've been flooded with telephone calls, because people don't know when the pick-ups occur. They work with a fairly small staff, and now they're taking an immense amount of time answering phone calls from people who don't know when their pick-up is. That would have presented a classic opportunity for a city agency to use cable. You could put a graphic on the screen and say, 'Section A, pink, this is when your pick-up is. Section, B, blue, this is when your pick-up is.' I mean, we're talking about real mundane stuff like that."

This is an extremely important meeting," said Mayor Loni Hancock in her opening remarks at the April 7 cable TV workshop. "We live in an information society. As a democracy, we are increasingly starting to make complicated decisions as citizens on social, financial, and political issues. It's absolutely essential to have means of fully informing people. Television is the major media of exchange in our society; 86 percent of the American people get all their information from TV news. How we take this new technology and use it to democratize the flow of information is really very important for the long-term vigor of our democracy and our culture."

Mayor Hancock went on to explain how the city was at a telecommunications crossroads, because of the changing nature of both the technology and regulations governing cable television service. "I would encourage you all to dare to dream today," she said, "not only about how cable TV can be used in the next few years, but for future generations."

The meeting itself was both a success and a frustrating reminder of how ill-served Berkeley is by its current cable

arrangement. Without a community access channel to notify Berkeley residents of the meeting as an upcoming community event, the organizers were forced to rely on the vagaries of the available print media for publicity. Bay Cablevision, for instance, had agreed to enclose notices of the meeting in its April billing, but because of an unfortunate snafu, most of the notices weren't mailed until too late. "It's a good thing I was already scheduled to speak here today," quipped Sean Gordon, the assistant city manager assigned to the cable task force, "because I just got my notice in the mail this morning."

Nevertheless, a sizable crowd showed up, somewhere in the range of hundred people. "This turnout," observed Gordon, "is excellent for a community the size of Berkeley." Still, the crowd wasn't what you would call a cross section of the community; it was more a gathering of interested parties—independent video producers, community activists, and social service providers—people, in other words, with more than the average stake in Berkeley's information future. When video consultant Kathleen Schuler, who was acting as meeting facilitator, asked for a show of hands from people with direct experience in video production, nearly half the hands went up. "Oh, well," she said, "I guess I'm preaching to the choir today."

A cheerful, humorous, and enthusiastic MC, Schuler's background is not in video production or telecommunications, but in public policy and organizational management. "I'm not very popular at dinner parties," she said, standing before a large drawing board, Magic Marker in hand, "because I can't seem to talk without drawing on the walls."

"Let's have a show of hands," she said. "How many found out about this meeting by getting a letter?"

A small number of hands went up.

"Some mailing list we got," she said. "How many by reading the *Berkeley Voice*?"

"The City Council has had people screaming at them about cable TV for ten or fifteen years—so what they've hired us to do is find out what the community really needs and wants."

A larger number of hands.

"Good. Anybody else here who thinks they are in a Tai Chi class?"

Everybody laughed.

After a question-and-answer session, in which Schuler and Gordon explained some of the basic issues to be considered during the franchise renegotiation process, members of the audience were encouraged to comment on the current level of cable television service in Berkeley.

"I want to make a favorable comment," said one man. "We've got four PBS channels. We've got Bravo and Arts and Entertainment. I would hate to wake up tomorrow and find three of them gone because I think they're what cable is all about."

But most of the comments were unfavorable. In fact, the meeting soon turned into a kvetching session: "I'm unhappy with the way they do the bills. They give you a week to pay and then you have a late fee." "A lot of us only

have 36-channel televisions or VCRs, and why can't we have the things we like on those channels, like PBS stations, instead of Quality Shopping or those incessant music things?" "I have a problem with the hard-sell approach of their salesmen." "My apartment manager won't let the cable in." "They keep changing and dropping channels. I've just lost Channel 40." "I don't want to have to take off a day from work to get my cable hooked up." "I think Berkeley should require undergrounding."

Several people complained about long waits before service people at the cable office answered telephone calls, but one woman said this was no longer a problem since Bay Cablevision recently put in a new touch tone automated switchboard service. Yet someone else felt the new phone system "discriminates against people with dial telephones."

Up until a few years ago," Harriet Moss had told me, "Berkeley's system was renowned for being badly run. It had very few subscribers; between 1968 and 1985, there were somewhere between 3,000 and 5,000 subscribers, which is a very small number for a city the size of Berkeley."

"Actually," she said, "Berkeley started off with a very good franchise agreement, but a few years after the franchise had been let, the cable company took the city to court to alleviate certain regulations that the city had written in. A lot of dust arose and when it settled, the franchise agreement had been weakened."

In the beginning, Berkeley had been given a community access channel, but the franchise holder at the time, Telecommunications Inc. (or TCI), a large media conglomerate with a poor reputation for community service, pleaded that the system wasn't profitable enough to support the city's extensive community service requirements. In 1976, after a period of prolonged litigation, the City Council went into close consultation to con-



Harriet Moss

sider a settlement which included the dropping of Berkeley's community access channel. Community access video activists opposed the deal, but the City Council voted to approve it.

According to activists and city officials, TCI lived up to its reputation for poor community service, while its customer service was nothing to write home about either. But, in retrospect, the really frustrating thing for Berkeley was a matter of timing. Only a few years after allowing Berkeley's franchise agreement to be watered down, city officials watched the cable industry become wildly profitable due to a relaxation of FCC rules and the

increased availability, via satellite, of entertainment programming. Suddenly, cable companies were competing hard with one another, offering cities access channels, state-of-the-art production equipment, studios, mobile units, you name it. Unfortunately, Berkeley's franchise did not come up for renewal during that time. What later became known as the "Cable Television Wars" of the early '80s came to an abrupt end when Congress passed the Cable Act of 1984, taking away the right of cities to regulate rates—an important bargaining chip—and writing in the "presumption of renewal" clause that effectively put the burden of

proof on the cities to demonstrate a franchise holder was not providing reasonable service to customers or the community.

In 1986, Berkeley's cable franchise was acquired by the Lenfest Cable Group, a middle-sized cable operator from Pennsylvania, as part of a complicated stock swap with TCI (TCI retains 48 percent of the stock in the Berkeley system). Although there are still obviously a lot of complaints, most city officials concede that Bay Cablevision has improved the level of customer service substantially from the days of TCI, has marketed the system much more actively,

and is offering a broad range of programming. Though there still isn't a community access channel exclusively for Berkeley, in 1988 the company began offering a limited amount of air-time to local producers on Channel 28, a station that is shared between Berkeley, Richmond, El Cerrito, and Hercules.

In the few years that Lenfest has owned the system, subscribership has nearly tripled, from 4,500 to about 12,000. These numbers are important; the more subscribers there are, the more valuable the system. Sean Gordon estimates that each subscriber is worth between \$2,000 and \$3,000 to the franchise holder. "Everything that a city can ask for from a cable company comes down to what is reasonable," said Gordon, alluding to the language of the Cable Television Act. "And what is reasonable is based on what sort of benefit the company gets from doing business in Berkeley."

After the kvetching session, and a short break for coffee and cookies, Schuler showed those attending Berkeley's cable workshop a tape of community access programs from Santa Ana, one of those fortunate communities that negotiated its franchise agreement during the Cable Television Wars era. Santa Ana has what is known in the business as a "bells and whistles" cable system, and the range of programming cable-cast there includes everything from amateur dramatics to high school football games to a very professional-looking community newscast. "Notice the Southern California touches," said Schuler as she showed a clip of a young newscaster with blow-dried hair and slick computer graphics next to his face. You could almost feel the envy of the video activists and producers in the room. Santa Ana has invested heavily in mobile video units, and the programming had a lively, non-studio look to it.

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After showing the video, Schuler asked the workshop participants to talk about what they would like to see in a cable television system, and what they felt the community needed. "During the earthquake," said one woman, "hearing-impaired people didn't get any instructions on what they should do. I'd like to see some kind of news program with captions."

"Unpopular views don't get any hearing," an older man said. "Anybody can put out a little newspaper these days, but television, the most vital news medium, doesn't give any access. We should have some place even for people to mention the word 'socialism.'"

"I'm with Berkeley Dispute Resolution," said another man. "We'd like to have training in dispute resolution, on how to resolve our disputes over noise, tree-view conflicts, over-the-fence conflicts, dogs."

"Alternative media," said a man wearing a postal department hat. "Unbiased news sources."

"There's no such thing as unbiased news sources," argued another.

"Maybe what we want," suggested Schuler, "is the full range of biases."

The Berkeley city clerk, Marie McKechnie, was at the workshop, and she mentioned that she would like to see the dissemination of election information.

"A Berkeley studio," said one of the independent producers, "and equipment of sufficient quality that it won't destroy the tape in the editing process."

"Information for disabled people," said someone else. "Training for careers in the media."

"Information about ecology, and what we can do to protect our bio-region and our wildlife," suggested yet another.

"Homework-helper," said a task force member, "where a kid at home can phone in to a teacher who can explain the

"This started off in Irvine," observed Schuler, "and it's very popular."

Listening to cable television experts talk about cable television can be both a confusing and a tantalizing experience. As with any new technology, there are all sorts of new words, terms, and usages. A "footprint," for example, is defined in the world of cable TV as the "geographical area which receives a satellite signal without distortion," according to a valuable document called *Community Guide to Cable Television*. "Downstream"? That's the "direction of the cable signal from the headend to the subscriber." "Headend"? That's the "electronic control center of the cable TV system where incoming signals from an antenna, playback equipment, or computers are amplified, filtered, converted, and transmitted to the system."

A cable television system is "addressable" if it has the capability of "transmitting video, audio, and/or data to specific locations or 'addresses' on the cable system," which makes it possible to have such things as "pay-per-view" programming like a baseball game or a prize fight. Addressability, obviously, increases the potential for "narrow-casting"—"providing programming for a specific interest group rather than for a mass audience."

Some cable terms derive from video technology, but other meanings are related to changes in the laws. The term "public access," for example, should not be confused with "community access" for it has a much more specific meaning. "Public access is usually noncommercial, first-come, first-served access, with no program content control," explained Schuler.

These days most communities are asking their cable operators for educational and governmental access channels as well as public access. Educational access could mean things like tele-courses, and government access can include everything from community calendars to tel-

vised council meetings to the use of the cable for data or storage or two-way communication. Most cable experts believe a city should have at least three access channels, one for each sort of use, so these very different constituencies don't compete with one another for cable time.

There is good reason to hope that Lenfest will be cooperative when it comes to reserving channel capacity for the city—at least, that is what the company agreed to in recent franchise negotiations with Richmond. But even if the city is given channels, that doesn't mean that Berkeley will be able to operate a state-of-the-art community access system. That would require equipment and staffing—in other words, money. Berkeley is currently receiving a yearly franchise fee of five percent of the system's gross receipts, the maximum allowed by law—but that fee is currently being used for other purposes. Forty percent of the franchise fee is going into a fund for cable undergrounding, and sixty percent has been going directly into the city's general fund. To fund real cable access, the City Council would have to be willing to set that money aside for video equipment and staff—a difficult decision in a city quite hard up for funds.

It all comes down to a question of what the community needs and is willing to support. "There is an assumption that

there are needs that aren't being met," said Harriet Moss. "The City Council has had people screaming at them about cable TV for ten or fifteen years—so what they've hired us to do is find out what the community really needs and wants, particularly in terms of these community-use aspects."

A specialist in the field of community access television, Moss grew up in a small town in Pennsylvania, which, coincidentally, is only forty miles away from Lansford, Pennsylvania, the first American community to have a cable access system. Moss developed an interest in video when she was an undergraduate studying folklore at Yale in the early '70s. Videotape seemed a promising medium for folkloric recordings, so she decided to take a seminar that was being conducted by Peter Davis, the documentary filmmaker who later produced the controversial and immensely watchable *Middletown, USA* series on PBS. Davis, said Moss, was pretty down on commercial television and the possibility of doing socially meaningful work on the commercial airwaves, and he was telling his students that public access cable television was the only way to go. Moss soon found that she was more interested in video than folklore.

"Did it ever occur to anyone," I asked Moss, "that people in Berkeley might not care that much about the cable franchise, because they simply don't like television?"

"Yeah," she said. "I mean it's hard not to think about it, because that's usually people's initial reaction when you talk to them about cable television, that they don't like TV."

"But you don't buy it, huh?"

"I don't buy it, and I think it's a Luddite way of thinking," she said.

"You want to know what I do when I want to get really scared?" she added. "I read *The Media Monopoly*." (*The Media Monopoly* is a book by Ben Bagdikian, the former dean of the UC Berkeley Graduate School of Journalism, about the increasing concentration of mass-media ownership.) "When I see television, I see

"People's initial reaction when you talk to them about cable television is that they don't like TV, but I don't buy it. I think it's a Luddite way of thinking."



Nancy Bickel

it in a political context, not an entertainment context. Television is now the most powerful means of communication in the United States of America. It's more powerful than print. It gets to more people than print does. Are you willing to allow that medium, in this country that is supposedly a democracy based on the free flow of information, to be controlled by five companies? Everyone in the media market has pretty much agreed that by the year 2000 there will be five or six companies that control virtually everything we see or hear. I can't think of anything more terrifying than that."

"The only chance that people have for accessing television is cable," she said.

"This is the only chance, period. I mean anybody who has ever tried to get a commercial television station will know what I'm talking about. You would think it was outrageous if people didn't know how to write, and to me it is exactly analagous. You've got something now that's more powerful than the written word in many ways, and you have people who are content to let other people deal with it, to let other people give out information without any education on how to critique that information.

"Can you imagine if you were able to write anything you wanted about me, and I was not able to write a letter to respond? That's exactly what TV is like. And peo-

ple are just so used to it that they don't see it. That's why I feel compelled to say, 'Wake up! This is a huge monster power and you better learn how to use it, and you better learn how other people use it, especially if there are going to be only six other people controlling everything you get, information-wise.'"

Moss had wanted me to meet Wally Simbab, the third cable consultant who is working in Berkeley, because his area of expertise is telecommunications planning, and he might be able to help me understand the "larger framework" of how cable can help cities communicate with their

citizens. Simbab lives in Berkeley but he was up here for the workshop, so I arranged to meet him one morning in the lobby of the Claremont Hotel. When I arrived, Harriet Moss was waiting for me, and when Simbab came downstairs, we got some coffee and pastries and sat down to talk television. We were soon joined by Kathleen Schuler.

"You know," Simbab said, after we had been talking for an hour or so, "You keep asking, 'What can cable do?' Cable can't do anything. It's like computers, or telephone service. These are all only machines. What you have to do is know what you're doing and see where these things fit, so I resist the notion that cable is something that *does* something."

"But I think his question," suggested Schuler, "is, what are the applications, other than video programming?"

"All cable is," said Simbab, "is a transport platform. You can put data on it if you want; you can put video conferencing on it. You can even operate it like a video phone, just point-to-point. Closed circuit between any two points. It can be used to direct video programming to an entire community, or, if it's an addressable system, it can be used to direct a program to only certain houses within the community."

"I don't see that it is our business to be telling [Berkeley] what kind of transmission mechanism to use," he said. "We're simply talking about capability."

"There are about 120 communities now with active government channels in California," said Schuler. "Of those 120, city council meetings represent the vast majority of the programming. Some cities have consciously wanted to adopt the C-Span model at the local level. And they have found that, if they are covered appropriately, there is actually higher attendance at the meetings, and people are more active in finding ways to have their voices heard because the meetings are more accessible."

"To what extent do people actually use

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the public access to talk about social issues?" I asked. "And to what extent is it just, like, dance shows and hang-glider exhibitions?"

"It's a function of the planning and the design process," said Schuler. "We hope that we are helping the community use cable in a meaningful way as opposed to what is generally referred to as 'vanity video.'"

"Vanity video?"

"Well, the example you just gave," said Simbab, "of people... what did you just say? Juggling watermelons?"

"No, I didn't say that."

"Dancing bears. Juggling clowns?"

"Dance shows and hang-gliding exhibitions."

"You have to understand what the basis for public access is," said Moss. "Originally most everybody who was interested in public access was a political activist. They saw it as an organizing tool. It took the franchising wars of the early '80s for public access to actually become popularized and suburbanized, and all that other stuff. The first people who were doing public access were doing guerrilla television, and there are still, to this day, a lot of people with strong opinions who are savvy enough to realize that this is a good medium for them to get their opinions out."

"Guerrilla television?"

"Yeah, that was during the early days of the porta-pak. I mean, portable video recorders didn't hit America until 1967. The first people to get their hands on them were video artists and activists."

"It's a lot like the PCs that first came out," said Simbab, "and you had the hackers and computer nerds—they were the first ones to have personal computers and they did their thing with them. With video it was the same sort of thing. Video freaks tend to be... well, look, it

was the '70s and there was this sort of aura of activism."

"More recently," said Moss, "the public access movement has moved away from a dedication to presenting these confrontational marginal political viewpoints, and into actually giving this technology to people in the schools, people in nonprofit organizations. It has started to become a little more institutionalized."

The key function in all of this is outreach," said Schuler. "If you take a very passive attitude, as we find in many cities, a situation where a cable company is reluctantly running public access with only minimal effort going into outreach, only the most dedicated or the ones who have the most resources end up using public access. Around the Bay Area, you find people who have their own video equipment, who are already videographers, who come and capture the station. Or the religious community, which has access to a tremendous amount of produced material. So many of the access channels in the area become defined by a very narrow group of users. But where there is planning, where there is real outreach, you'll consistently find a range of views that more accurately reflects the community itself."

"Increasingly, both governments and cable companies are turning to nonprofits," Schuler went on, "independent, dedicated nonprofits, whose sole responsibility is to manage the channels, particularly public access channels."

"What about the Big Brother question?" I said. "I mean, when you're talking about municipal government running this elaborate video apparatus, using it to transmit information, won't there be some people out there saying, 'God, the politicians are coming right into my home?'"

"Yeah, you raise a good point," said Simbab unenthusiastically. "I think that people do probably have that fear. But

"People perceive the city of Berkeley as being difficult to get information from. The city has all these marvelous programs that people just don't even know about. It's very hard to find out what the hell is going on."

there are different models for doing this. I mean, there is certainly the Big Brother model. As I recall, in 1984, there was a screen in your home that was wall-sized and which was controlled by a single government source, one that could listen and transmit images and sounds out as well as in. It was largely out of your control. It spoke to you when it wanted to and it had this sort of mesmerizing effect. Now, some people argue—and I'm not saying this is my perception, but I've heard it argued—that the existing system of commercial television comes as close to that as anything, although VCRs that you can fast forward and so forth have helped a little bit. What we're talking about is a different sort of model. It's not about having a listening device in your home."

"I guess what I'm really asking," I said, "is, does having this sort of technology available increase the cacophony of debate, or does it actually give whoever is in charge of the operation more control?"

"Look, it depends on how you define your resources," said Schuler. "It's up to each community to identify who is going to have access to and who is going to control the message that goes out. In many communities, the government has a very major role, has very active

channels, which they use for a whole variety of things. But most of what they do is fairly passive programming, like city council and government meetings, because, beyond that, the programming gets very expensive. But educational institutions and the public at large can also have access to the medium and they control their own content, so, yes, if it's successful, you hope it increases the debate."

"In some cities the government has been kind of sophisticated in the way you're suggesting," said Moss. "They've said, 'Okay, we're going to put all the resources into the municipal channel. Maybe we'll throw a bone to the public access channel, but we won't put much money into the operations. In the majority of communities around the country, however, most of the resources have gone towards public access, and none, or very few, towards municipal access.'"

Listening to all this technical detail, it's easy to lose perspective on the mundane problems these new "tools" are supposed to address. The machinery is wonderful, but what evidence is there, really, that Berkeley has a strong unmet need for community access television? Harriet Moss, for one, is convinced that there is a local information gap and has been ever since the *Berkeley Gazette* shut down in the early '80s. "Over and over again, that is something that has been repeated by just about everybody we've talked to," she said. "The fact that there is no daily paper. The fact that it's very hard to target Berkeley audiences for anything. The fact that the city has a difficult time letting people know what it is doing and what its program is."

"People perceive the city of Berkeley as being difficult to get information from. The city has all these marvelous programs that people just don't even know about. It's very hard to find out what the hell is going on."

Perhaps... though I think

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that in reality producers of information—city officials, arts program directors, community activists—are feeling the need to communicate much more than the average citizen is feeling deprived of information. I have been covering local politics and government for more than a decade, and I have always found the demand for public affairs information to be rather limited. If you are ever in a social situation and, for whatever reason, you want to see someone's eyes glaze over, just ask your conversational partner if he or she has really considered some of the possible ramifications of the latest municipal ballot measure. I think it was Barbara Ehrenreich who once wrote that "local politics" were the two most boring words in the English language.

Fact is, it really isn't that difficult for a citizen to be informed if he or she really wants to be; anyone can go by the city clerk's office and pick up a City Council agenda, or call up a council aide, or see what's available in the public library, or go to a Wednesday night school board meeting, or listen to live broadcasts of important public meetings on radio station KPFB, or cull the important matters from the plethora of available print sources—the *Express*, the *Daily Cal*, the *Berkeley Voice*, the *Oakland Tribune*, the *Berkeley Post*, or the *San Francisco Chronicle*. But that involves a lively interest, and a certain amount of work. I think what people really mean, when they complain about the information gap,

is there is no really passive, lazy, and idiot-proof method for informing a willfully ignorant public.

I recently asked Nancy Bickel, the chairperson of the city's cable TV task force and an active League of Women Voters member, if she thought there was a local information gap. "Oh, yes," she said, "ever since our local daily newspaper went down the tubes. What happens is people get really mad when their ox gets gored and they find out about it after the fact. Don't you hear it at parties, people who complain because someone just put up a new building on the block and they didn't know anything about it? Maybe they didn't get notice about a Planning Commission meeting."

"I think the *Express* and the *Berkeley Voice* do pick up on the issues," she added tactfully, "but they can't do enough to make up for the loss of the *Gazette*. Near the end there, I think they were doing really good coverage of the school board and the City Council, the Planning Commission. They had reporters who had enough familiarity with the issues and they could provide the kind of day-to-day coverage that is hard for weeklies to do."

I am always tickled to hear people lament the passing of the *Gazette*; I was an intern reporter there covering City Hall for six months a couple of years before the paper went out of business, and I remember how few people

seemed to read it and how many seemed to disparage it without having any firsthand knowledge of its contents. It's not unusual for people to dislike their local newspapers—familiarity, as they say, often breeds contempt—but the *Gazette* seemed to have an extra load of negative karma, dating back to the days when it took an actively hostile attitude toward the changes of the '60s.

By the time I worked there, the paper had changed hands a couple of times, had an enlightened, moderately liberal editorial policy, and a savvy, if understandably cynical, young editor named Steve Young. Young, who grew up in H.L. Mencken's home town of Baltimore, tried to put out a decent community newspaper in spite of increasingly savage budget cuts. There were some talented freelancers working for the paper, and if you wanted to read on Wednesday what the City Council did Tuesday night, it was there.

When things start going downhill for a newspaper, though, it's a very difficult thing to reverse. I remember one day when a freakish electrical storm took out the *Gazette's* Richmond printing press, and Young had to take the paper to Alameda to be printed. A smart-alecky *Daily Cal* reporter called him and asked him if he thought God was trying to tell the *Gazette* something, to which Young replied, "I don't think God reads California newspapers."

Nor did many mortals read this partic-

ular California newspaper. During my tenure, the number of subscribers was already perilously low and seemed to consist mainly of elderly Republicans who relied on the paper for their TV listings and community activists who couldn't wait a week to find out what had happened at the Planning Commission. The company that managed the paper tried a number of gimmicks, a tabloid makeover, bringing in a whiz-kid hippie publisher from Woodstock. Finally the owner pulled the plug.

This was probably Berkeley's last chance to have a daily newspaper of record. Several years ago, a group of local journalists and community activists began to talk about starting a local daily, to be called the *Berkeley News*, but they quickly shelved that idea in favor of a weekly when they realized how expensive it would be to start one up. "As I travel the highways and byways of this great state of ours," says Larry Bensky, who was one of those involved in the initial discussions, "I see all kinds of small-town dailies that seem to be thriving. But these are already established. When you think about the start-up costs, it just doesn't seem feasible."

To people outside the publishing industry, it seems incongruous—Berkeley certainly seems big enough to support a daily paper; the question is whether it is isolated enough and affluent enough to support its own daily paper, given the in-

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cursions of the *Chronicle*, the *Tribune*, the *Examiner*, or even the West Coast edition of the *New York Times*. Berkeley is unusually cosmopolitan for a city of its size; many people—especially the students—don't care that much about community affairs, and many others, having grown up reading the *LA Times* or the *New York Times*, are not interested in reading a community daily newspaper.

But if Berkeley will never again have a daily newspaper of record, what about a community access channel of record, or rather, three channels—public, governmental, and educational access? In cable television circles, people talk a lot about a concept known as “narrow-casting,” that is, pitching a show at a small, in some cases even minuscule, audience of interested viewers. It is feasible to do this because the costs are relatively low, providing you have the access channels and a modest amount of equipment. In cable-casting, unlike broadcasting and newspaper publishing, the programmer is not a slave to what Wally Simbab calls the “tyranny of the mass audience.”

“It's like being given a free printing press,” says Simbab, “and all of the page layout and so forth, and free mail, so all you have to do is to put the cost into actually creating the substance, putting to-

gether the information.”

As I thought about it, I began to agree that cable TV offers unique opportunities to a city like Berkeley, a city with a much larger than average number of people who are very interested in local politics, along with a broader public of uninformed and occasionally interested readers. Cable television is able to allow a subscriber to choose his or her level of participation. Those who just want to know when their cans and bottles can be recycled could click their remote controls over to the government channel and read the “crawl text,” while waiting for *America's Funniest Videos*. A more interested citizen could record City Council meetings (and fast forward past the most tedious parts). And real political junkies could watch a live call-in show, or maybe even produce their own videos.

“Down in Mountain View,” said Harriet Moss, “they've got this wonderful show that I've watched evolve over the years. It happens before the council meetings, and it's the ex-mayor of Mountain View and a community activist analyzing what's on the agenda. They even show little pre-produced pieces on hot agenda items. They'll have interview shows where they'll say, ‘Okay Mike, you're in the public works department, what does this actually mean? You're going to be changing the parking, why are you doing this?’ It looks like a news program. I mean, it's great. It's an incredi-

ble service for people.”

“Ideally,” said Nancy Bickel, “I would like to see a special nonprofit organization set up to run a community access channel, with a board of directors and a staff person, but that takes both dedication and money. It depends on whether the City Council would want to pull the proceeds of the franchise fee from the general fund to use for cable TV rather than other concerns. I would hope we'd end up with a good case for public access, but I don't know. As far as I've seen, the council is not divided on this along factional lines. I think everyone is generally very friendly to the idea, but I do not know how much money they will be willing to put into it.”

Again, it all comes down to a question of need. The city will have to show a public need for cable access in order to convince Lenfest, or possibly another cable company, to provide the channels and perhaps the equipment to make it possible. Community television activists will have to convince members of the City Council that there is enough of a need for community access cable television to pull money—a conservative estimate would be about \$150,000 a year—out of the general fund to support its operation. This may be Berkeley's best chance to put up or shut up about the need for more and better information about the city, its culture, and what goes on in the community.

The April 7 community workshop was deemed a very great success by the city

officials and consultants who organized it. The meeting had been scheduled to run for about three hours, but many in the audience stayed well past the 4:00 p.m. end-time to ask questions about the potential of cable technology. This showed a great deal of interest on the part of those who came, but if the idea was to find out what the average Berkeley citizen wanted or needed, it didn't seem like the most representative crowd. When Harriet Moss had originally described the needs assessment process to me—focus groups, individual interviews, even the community workshop itself—it seemed likely that the results would be skewed toward people who had more than the average stake in a community information system.

“That's probably true,” she freely admitted.

“Well,” I said, “in terms of the needs assessment, how, then, are you going to reach the average, apathetic citizen?”

“Well, I question that that's who we want to reach,” she said. “I think the first tier of people who use public access or any other kind of new technology are people who have some kind of fire in their bellies, for whatever reasons, political or personal. And those people then have to go out and start proselytizing other people. We're not running public access, and that's really the job of whoever is running public access—to reach those people, to make community programming an essential part of people's lives in Berkeley.”

AGENDA
COMMUNITY CABLE TELEVISION WORKSHOP
April 7, 1990

1:00 OPENING REMARKS

Nancy Bickel, Chair
Cable TV Task Force

- Purpose
- Introductions

1:05 WELCOME

Mayor Loni Hancock

1:15 PSA DEMONSTRATION

1:30 WHY WE ARE HERE

- Franchise Renewal in Berkeley
- "What's on the Table" A Review
of the Cable Act of 1984
- Public Comment & Questions

Sean Gordon,
City Manager's Office

Kathleen Schuler

2:00 BREAK

2:10 WHAT IS COMMUNITY ACCESS?

- A brief history of access
- How other cities use access
- Questions and Answers

Kathleen Schuler
Demonstration

2:30 HOW COULD BERKELEY USE CABLE?

- How can you use cable?
- How can cable serve the Berkeley
community?

Group Discussion

Group Discussion

3:15 NEEDS ASSESSMENT

- Review of the Survey
- Questions and Answers

Kathleen Schuler

4:00 ADJOURNMENT

Be Sure to Fill Out A Survey Before you Leave. Thanks! (Over)

PUTTING TODAY IN PERSPECTIVE

- 1969-75 City develops cable television franchise; provisions include public access, local office, rate regulation.
- 1976 A court settlement with the franchise holder ends requirements for local office, public access; limits rate regulation; dedicates 40 per cent of franchise fee revenues to undergrounding utilities.
- 1984 Federal Cable Communications Act of 1984 preempts local regulation of cable rates, many technical standards; sets rules for granting and renewing franchises. Court decisions have already exempted programming content from regulation, and soon make exclusive franchises illegal.
- 1986 Berkeley's Franchise, with several neighboring cities', sold by TCI holding company to Gerry Lenfest holding Company. Subscribers in Berkeley now 4500, basic rate \$10.95.
- 1987 City Council approves franchise transfer after review; Citizen Task Force authorized to assist in re-franchising.
- 1989 Subscribers reach 11,800; rates \$15.95
Consultant hired to:
•Analyze cable system's financial, technical and business operations status
•Assess community and government cable-related needs
•Identify telecommunications options for the city.
These studies comprise the legal framework of negotiations for a new franchise.
- TODAY COMMUNITY CABLE TELEVISION WORKSHOP**
As part of community needs assessment, Community Cable TV Workshop held to discuss how the Berkeley community could use public, educational and government access. Sample programming shown and a PSA taping demonstrated. Public comments and questions solicited. These comments become part of consultant's report to the city and the legal record.
- 1990 Consultant report to Council with Task Force recommendations. Council instructs city staff on how to proceed with new franchise negotiations.
Negotiations with prospective cable operator(s) begin.
Congress and FCC debating revisions to Cable Act & regulations.
- 1991 Franchise Expires August 3, 1991

SUMMARY
CABLE COMMUNICATIONS ACT OF 1984 -

The Cable Communications Act of 1984 establishes the guidelines for the regulation of cable systems and provides a framework for the negotiations of a cable franchise. This brief summary only focuses on access and other issues affecting the consumer.

FRANCHISE - GENERAL: The city may not award an exclusive franchise. A city may own its own cable system but may not regulate program content. Phone companies are banned from providing cable services in their service areas.

FRANCHISE FEES: The City may require the cable operator to pay an annual franchise fee, which cannot exceed 5% of the operator's gross receipts. The city's use of the franchise fee is not restricted.

PUBLIC, EDUCATIONAL AND GOVERNMENTAL ACCESS: The city may require public, education and governmental access channels and facilities. If the operator is required to pay for access operations, the payment is considered part of the franchise fee.

CABLE CHANNELS FOR COMMERCIAL USE (LEASED ACCESS): Cable operators with 36 channels or more must make a percentage of the channels available for independent programmers at a reasonable rate.

RATE DEREGULATION: The city may not regulate rates if the city has "effective competition," defined by the FCC as receiving 3 significantly viewed, over-the-air broadcast channels. Rates are deregulated in most communities.

REGULATION OF TECHNICAL STANDARDS: The city cannot set technical standards that are more stringent than the FCC's.

CONSUMER PROTECTION: The city may set provisions for construction schedules and customer services, including response time to complaints and requests, location of the service office and billing information and services.

ECONOMIC REDLINING: The operator may not deny access to cable service based upon the income of the residents in an area.

PROGRAMMING: Cities can't require specific program services nor may they control program content except on a government channel.

CHALLENGES - CURRENT LEGISLATION: include rate regulation, city regulation of cable, phone company entry.

CHALLENGES - THE COURTS: include 1st Amendment challenges to the franchising process, PEG access, universal builds, franchise fees.

(by: Kathleen Schuler; April 5, 1990)

CABLE SCAN

Community Service Cable Television

Look Who's Using the Local Channels

Organizational Producers: Tying Cable To Existing Priorities

By Evelyn Pine

- Downey Community Hospital uses cable to teach self-help exercises to clients to combat arthritis pain.
- In San Luis Obispo, A.I.D. Neighbors Helping Neighbors recruits volunteers for area nonprofits through a weekly interview show.
- Six Toastmasters Clubs in Stockton use their cable show, "Success Through Toastmasters," to train their members in public speaking.
- In Los Altos, Foothill College is teaming up with experienced senior producers from the Cupertino Senior Center to train Los Altos seniors in cablecasting skills.
- In San Francisco the Chinatown Youth Center is producing videotapes in Cantonese to use cable to educate parents about kids problems in the United States.
- In Calveras County, the County Water District has tapped the local access organization to present four updates on a major dam project in the county.

In the course of encouraging local organizations to use access over the past five years, the Foundation has seen hospitals, schools, advocacy groups, arts organizations, senior centers, scout troops, professional associations and service clubs all embrace the community channels as low cost public information vehicles. Local groups use cable to train volunteers, educate the public, gain new clients, highlight new activities, and heighten their profile in the community.

Nonetheless, critics dismiss access as vanity video, racist demagoguery, or dead channel time. Those who support access know that a strong local constituency and the involvement of community institutions are the only way to destroy these misconceptions and bring political clout and valuable resources to the channels. While the efforts and energy of individual producers keep many access channels programmed, it is the involvement of community groups which brings credibility, public education dollars and manpower.

The question becomes why do some local organizations use the access channel on an ongoing basis, while others do not? Organi-

zations become committed to using cable when the use of the local channel is tied to their existing organizational priorities.

Outreach to Local Groups

Most nonprofit organizations don't begin using cable on their own. They are recruited to use the channel. Community outreach campaigns; visits from the access staff; special events like PSA Days, workshops and facilities tours; local programming grants; and programming by other organizations are all effective ways to encourage organizations to use the channel. San Francisco's Western Addition Cultural Center has decided to produce an ongoing program on Caribbean culture after using the access channel for the first time during a PSA day sponsored by the San Francisco Telecommunications Policy Committee. The Cable Television Explorer Post in Stockton is the result of Continental Cablevision's own community relations efforts.

Building on Existing Priorities

Most nonprofit groups and city agencies have limited staff, time and resources to devote to television production. Creating cable programming must be positioned as an activity which builds on the organization's existing priorities. To encourage these groups to use cable, they need to hear a convincing argument as to how cable is going to benefit them. Cable's low cost, ability to show rather than tell, community orientation, and potential for narrowcasting are all benefits which speak directly to nonprofit programmers.

Ensuring Ongoing Use

Once a nonprofit has begun programming, three factors sustain ongoing useage: support from the organization's policy makers, a low-cost, easy-to-produce program, and clear validation of the program's value.

Organizational support means that the Board and staff have an ongoing commitment of the organization's resources to the program. Bob Clancey, producer of the Cupertino Senior Center's program, *The Better Part*, states, "Institutions provide resources, longevity and credibility." Support from the Downey Community Hospital administration meant that doctors and therapists were willing to interrupt their schedules to serve as on-camera experts.

One way to encourage organizational support is to include the Board and staff in the program's planning and promotion. Toastmasters in Stockton encourages the club's leadership to serve as crew members and co-hosts to see the energy and excitement involved in production. A.I.D. Neighbors Helping Neighbors interviewed their board as part of their initial program and again on their Christmas special.

To ensure organizational financial support over time, on-going productions tend to be low-cost. Although some producers claim quality is only synonymous with expensive production values, when planning for the long term, inexpensive productions make the most sense. Simple programs, if put less strain on the organization's people and resources.

The producing organization must feel confident that it can cover any costs associated with the programming out of its own budget or through additional fundraising. A successful community service cable program must enhance the organization, rather than become a financial burden. The project's benefits must justify its costs.

Documenting the show's value is a key way to build long-term organizational support. Savvy organizational producers not only measure audience through live call-ins or mail back give-aways. They document the number of people who participate in training and production, and track increases in clients, membership or volunteers.

This issue of *CableScan* presents four organizations producing community television that have made the link between their organizational priorities and the use of cable: Downey Community Hospital, Toastmasters of Stockton, A.I.D. Neighbors Helping Neighbors of San Luis Obispo, and the Cupertino Senior Citizens Center.



"Institutions provide resources, longevity and credibility," according to Bob Clancey, producer of the Cupertino Senior Citizens Center's long-running cable series, *The Better Part*.

Four Years, 120 Programs Later . . .

Cablecasting 'Unique Adventure' For Senior Center Members

In 1983 the Access Director for Cupertino Community TV recruited eighteen members of the Cupertino Senior Center to be trained on the brand new access equipment at the De Anza Communications Center. I was the only one of the bunch who actually had any prior experience with video," Bob Clancey, a retired nuclear physicist remembers. "Almost four years and 120 programs later, there's no end in sight."

With 1500 members, Cupertino Senior Center is one of the largest centers in the Silicon Valley. The Center's half-hour magazine show, *The Better Part*, is cablecast weekly over United Cable Channel 3. According to Clancey, the show usually consists of two to four individual segments. "We don't mind having two long segments if the information is good. The beauty of this kind of television is that it can look at issues in depth unlike network TV."

"Our purpose has always been to produce shows by and for seniors," Clancey continues. "We interview experts about health, money, consumer issues, library services, the arts. The shows are entertaining, and if there's a senior angle, we'll find it."

"The key to the whole project is the cooperation between the Director of the Access Center, the Director of the Cupertino Senior Center and the volunteers. The institutional support is very important. You can't work in a consistent way as a group of volun-

teers. Institutions have resources, longevity, and credibility," Clancey states.

"We planned from the beginning to have the volunteers take almost complete responsibility for the show," Senior Center Director Nancy McGinniss explains. "That's what makes it exciting. It's unbelievable what they've accomplished."

The volunteer crew meets with the Senior Center Staff once a month to keep them updated on the program's progress. The Center also provides storage space, promotion resources and occasional funding.

The program's funding base is varied. They've received donations from the Kiwanis Club, a grant and a VCR from the Santa Clara Council on Aging, and two grants totaling \$1200 from the City of Cupertino. "We also do fundraising luncheons," Clancey notes. "Our volunteers are excellent at hustling door prizes from local merchants. Because we get equipment and cablecast time free, our biggest expenses have been sets, and we've often had those materials donated by local businesses. Videotape is our biggest single expense."

"We've never done a standard audience survey, but we know people know us and that they're watching. We did a show called *Cooking for One or Two*, featuring a nutritionist from the food bank. People write in to get copies of the recipes," Clancey says. The show is promoted through flyers

and the monthly Senior Center newsletter. The Senior Center also serves as a viewing site for those without cable.

"The show is of the greatest value to the Cupertino Senior Center," McGinniss explains. "First, it's a service to our members, providing up-to-date information of interest to them. Second, the show is also an activity our members are welcome to participate in." McGinniss also provides information to senior organizations interested in organizing a similar program in their community.

Clancey adds, "*The Better Part* is a unique adventure for Senior Center members. We have a lot of self-motivation, and the quality keeps improving. The opportunity to be creative is what keeps people coming back. So much of what people do is meaningless. What we do matters."

Clancey has been helping Foothill College train Los Altos Seniors to produce cable television at their new access center. "I recommend if you're just getting started, you hook up with a community college's Life Long Learning program or Adult Education program. Get the Dean to sponsor classes on television for seniors. At Los Altos we already have a group of twenty-three people who want to do television there. They have tremendous skills simply from their training at Foothill College. And they have great esprit de corps. At Cupertino, we used a more bootstrap approach. Oh, it worked, but it took longer."



Because cable programming is an effective way to publicize Senior Center services while providing an activity for Center members, the Cupertino Senior Center has produced 120 videotapes in four years using an all-volunteer production team.

Cable TV a "Natural" For Toastmasters

"Television is a natural for Toastmasters," says Tom Becker who produces *Success through Toastmasters*, a half-hour show cablecast weekly over Continental Cable in Stockton.

Because Toastmasters is a group which encourages leadership through the development of public speaking and communications skills, cable is a logical way for the six Stockton Toastmasters Clubs to share information and training. The show consists of location footage of Toastmasters speaking at meetings framed with commentary by in-studio co-hosts.

The idea for the show originated with Becker, but he believes support from the local clubs is crucial to the show's success. The local leadership — the Division Governor and the Area Governors — participate as crew members and co-hosts. "They understand the show's value. They know it helps us attract new members as well as helping members improve their communication. At the end of each show we list meeting times and locations to encourage people to participate," Becker says.

Success through Toastmasters started in October 1986 and they have produced nine completed shows. All the participants in the show — both talent and crew — are volunteers. Becker, the producer, is in commercial real estate.

"The biggest obstacle groups doing access face is scheduling. We're an all-volunteer effort, but the only time we can tape the show is Wednesday mornings. Most of our members work. If I could tape on Saturday morning," Becker states, "I'd have more people than I could use."

The show is produced at minimal cost. "Since equipment and cablecast time are free, there are very few expenses — \$100 here and there for sets — which individuals pick up. Of course, we all wanted the set to include the Toastmasters' logo," Becker explains.

"We promote the show through the network of clubs we have. We announce it at every meeting and emphasize which of our members will be featured on the upcoming show. We don't put much energy into publicity outside of our network, though the show is listed on the community bulletin board."

"The show looks semi-professional in some ways," Becker states, "amateurish in others, but what's wrong with that? It's produced by amateurs, and it's getting better and better. What's important is it's a terrific opportunity for our club to use TV to do

we do best. I think *Success through Toastmasters* will encourage other clubs to start using cable."

City Grant Sparks Downey Hospital Cable Effort

"Cable is the perfect vehicle for us," states Downey Community Hospital Special Projects Supervisor Loran Lewis. "We've had a great opportunity to see what we could do — to see if we could make cable television a working part of our public education efforts."

The 180-bed hospital, founded in 1940, was a recipient of an \$12,426 grant from the Downey Public Access Corporation to produce a four-part health awareness series. Despite the hospital's inexperience in producing television, personnel changes within the planning group, and an expanding timeframe, the hospital is considering producing an ongoing series for seniors once their grant-funded programming is completed.

"We're now finishing up the third of four programs," Lewis explains. "This one is in conjunction with the Arthritis Society's 'Joint Efforts' self-help program." The show includes an interview with a Downey arthritis expert, a film from the Arthritis Society, and a demonstration of simple exercises by a hospital therapist.

The hospital had not considered making community television until they learned about the City of Downey's grants program for community institutions. "You see, the grant gives an organization an opportunity to test cable's effectiveness with very little risk factor. You can experiment. If the experiment is successful, the involvement can continue, and you put your own resources to the effort," Lewis says.

The project was developed by a program planning group including representatives from the hospital's community education, marketing and senior care departments as well as representatives of the cable system and the city. The initial planning group established a budget, mapped out the four-program topics and oversaw the production of the initial shows.

"The entire committee changed because of personnel shifts," Lewis explains. "Those of us doing the final two productions are a new group. Because the basic planning was strong, the project could withstand the stress of all that change. Still, the situation demanded reorganization. We changed topics to focus on what was current. The final show, for example, will highlight the new Heart Center the hospital is building. The staff changes also disrupted our timeline and threw us off schedule."

Not only are hospital public education and marketing staff involved in the show, but doctors and therapists serve as on-camera experts. "The show is definitely work above and beyond the call of duty," Lewis says. "When we're working on the programs, we're all volunteers. We needed the backing of the hospital administration to encourage health care people to participate in the show. The doctors and therapists have very busy schedules."

The hospital is currently considering how to use the cable channel once the grant is completed. "There is a lot of interest in a monthly series for seniors using local medical experts. We want to maintain our simple, straightforward approach to minimize costs. We'll stick to the interview format," Lewis says.

"Cable television is an excellent medium for hospitals to use for community education. The program has a two-fold purpose: to promote community awareness of health issues and to promote hospital services. We have a newsletter from which we get a good response. Cable television becomes an extension of that public education effort. For example, in the Arthritis show, when we demonstrate how easy the self-help exercises are, the viewer can see for himself. Only TV can convey that so directly."

Jazz Society Improvises Funding Partnership

by Teri Aarons
and Janet Curry

A year ago the Los Angeles Jazz Society began to explore public access television as a valuable resource. Our objective was to heighten the awareness of jazz through a half-hour talk show which would focus on local jazz artists and the history of jazz in Los Angeles.

An all-volunteer organization with a \$37,000-per-year budget, we have only a limited amount of time, people and resources to devote to a television production. However, the benefits of bringing a positive image of jazz as an art form directly to the community outweighed any reservations we had about producing our own TV series.

We began to formulate a television series, titled *Jazz In Review*, to be presented through all the local cable companies in Los Angeles. To obtain the necessary technical assistance and production costs, we decided to tap a number of funding sources for small sums of money that would be matched by the Jazz Society's own dollars and in-kind services.



Los Angeles Jazz Society Vice President Earl Palmer (left) hosts the first segment of *Jazz In Review*, featuring Mrs. Shelly Manne and Jazz Society Advisory Committee Chair, Al Aarons.

Being a newcomer to television production, we applied to the National Jazz Service Organization (NJSO) to give us basic training in pre-production planning, post-production skills, scheduling, script writing and other skills necessary to produce a quality production.

The National Endowment for the Arts (NEA) funded our annual Tribute and Awards Concert which honors a jazz great for his or her contribution to the art form. Through the NEA grant, we were able to use video to document the event, including on location interviews with various jazz artists. This footage is an integral part of *Jazz in Review* as well as our archives.

To finance the cable program, we applied to both the Foundation for Community Service Cable Television and the Department of Telecommunications for the City of Los Angeles. Each grant provided funding to support the production of four half-hour programs, including videotapes, editing, and set decoration.

Jazz in Review's format is simple but effective, featuring an in-studio host and special guests. Historical documentation, rare photographs and footage, including footage of the annual tribute awards and concert, were edited in during post-production.

By distributing the program across Los Angeles, we've developed partnerships with a number of cable operators including King Videocable in Sunland-Tujunga, Dimension Cable in Rancho Palos Verdes, American Cablesystems in Westchester, Copley Colony Harbor Cablevision in Wilmington, American Cablesystems in Hollywood, Palms and Mar Vista, Sammons Cable in Sylmar, Valley Cable in Northridge, Reseda, Canoga Park, Chatsworth and Granada Hills, and Buenavision in Boyle Heights. We particularly appreciate the partnership we've built with Century Southwest Cable in Santa Monica, where we produce *Jazz in Review*.

By tapping four different funding sources, the L.A. Jazz Society completed its first season of quality public access programming. We've placed copies of the program in schools where Jazz Appreciation is taught as part of American history. Through public access cable television the Jazz Society now communicates directly with the Los Angeles Community.

Teri Aarons is the President of the Los Angeles Jazz Society and Janet Curry is the Society's publicity director.

Destroying the 'Doom and Gloom' Myth

Community Outreach Helps Neighbors A.I.D. Neighbors

"Network TV would never let us do what we do," states Dixie Budke, Executive Director of A.I.D. Neighbors Helping Neighbors, a support network for San Luis Obispo non-profit organizations.

A.I.D., a clearinghouse for goods, money and volunteers, has a \$400,000 budget, one full-time staff person and part-time clerical support. Twenty-four local groups are member agencies, and over 200 other local organizations use A.I.D.'s services. A.I.D. coordinates a county-wide volunteer bureau, a year-round toy and food collection, and a shared resource program. Their weekly show, "Community Outreach," is a direct extension of their other services.

A.I.D. produces the interview program on Sonic Cable Channel 6 in San Luis Obispo. Each show focuses on a different local nonprofit, highlighting ways viewers can participate with the featured group. Cablecasting for three months, A.I.D. has produced twelve shows and a Christmas special.

A.I.D. learned about the availability of the channel through the Foundation for Community Service Cable TV's grants program. "We received a small grant of \$800," Budke says. "We used it to promote the show to the Chamber of Commerce, senior citizen groups and county nonprofits." The funds went for graphics, printing and postage. In


addition, the organization is purchasing their tapes from Sonic so the featured organizations can use them for training and fundraising. Sonic provides equipment, staffing and channel time for free.

Although the grant is complete, A.I.D. is committed to continuing the program. "The biggest obstacle in doing this kind of television is the lack of promotion. The grant gave us an opportunity to strongly promote the show from the very beginning. We now know a show like this works for us, our members and the community. The program we initially developed was so cheap, we're not worried about the costs of continuing."

Budke oversees the program which is produced by a core group of fifteen volunteers. Budke involved A.I.D.'s Board by interviewing them for the premiere program and including them in the Christmas special.

"On the networks when they deal with pressing community issues, you feel like they're simply dumping the problem on you. We're very special. We're not naive. We realize these problems exist. But, in San Luis Obispo a number of groups are dealing with these problems head on. We use cable to destroy the doom and gloom myth. People can work together and improve their community in wonderful ways."

Nuts and Bolts in Pasadena

 **Pasadena Community Access Corporation** (incorp. 1984)
Pasadena (pop. 125,000)
Falcon Cable franchise: 1984-1999
(30,000 subscribers)
54 Channels: 2 P, 4 E, 1 G, 1 Health
1 Library, 2 Lease
13-member Board: 1 school district appointee,
1 community college appointee, 1 cable
company & 1 city telecommunications
department ex-officio member, 9 City Board
of Directors appointees
Staff: Executive Director, Production Facilities
Manager
Activities: Not yet in operation
Operating budget: \$105,000

"For so long we've been focused on how we're going to get our daily bread that outside issues get pushed aside." John Helmore, General Manager of the Pasadena Cable Access Corporation (PCAC) explains. "De-regulation and its impact, sources of future funding, changes in the tax structure, how the League of Cities stands on certain issues all impact us, but it's hard for us to raise our heads above the nuts and bolts."

Incorporated in December 1983, PCAC, like Sacramento Community Cable Foundation, is one of California's landmark access organizations. Helmore explains, "We're a consortium of three large telecommunications institutions — the city of Pasadena, the Pasadena Unified School District and Pasadena City College, who have a vast potential for resources. This is both a blessing and a curse. Large organizations have their own agendas, and the issue becomes one of how can everybody mesh. Still, it's a marriage that can be very beneficial."


According to the original franchise, Falcon Cable pays 5% of gross revenues to the city. 40% of that franchise fee comes to the City Office of Telecommunications. On top of the franchise fee, an additional 2% of the gross plus a \$450,000 equipment and facilities grant were earmarked to support PCAC. However, in January 1985, Falcon Cable, citing economic factors, sought adjustments in franchise commitments.

"The city made allowances in the schedules and payments. One public access channel will be available in December," Helmore continues, "Falcon is paying the corporation \$105,000 in 1986, parcelling the money out monthly. The additional \$350,000 will be discussed later. Hopefully soon. The issue will be: did Falcon have better luck? The 2% above the 5% has neither been negotiated in or away."

The National Cable Communications Policy Act treats all operations payments to access centers as part of the city's franchise fee which is now capped at 5% gross revenues. Only payments negotiated prior to October 1984 are grandfathered.

The reduction of income demanded a com-

Managing Growth in Monrovia

 **Monrovia Cable Usage Corporation** (incorp. 1984)
Monrovia (pop. 32,000)
Foothills Cable (Daniels and Associates) franchise: 1981-1991 (2,600 subscribers)
36 channels: 1 PEG
5-member Board: 1 City Council appointee,
1 City Manager appointee, 1 school board
appointee, 1 cable company representative,
1 planning commission appointee
Staff: Community Access Coordinator & half-
time Production Manager paid by Foothills
Cable; 5 high school interns; 3 college interns
Programming: 15 hours produced per month;
40 hours programmed per month
Other Activities: Community Bulletin Board;
monthly program guide; free training
Operating Budget: a portion of the franchise fee
equaling 1% of the operator's gross revenues
is earmarked for the Corporation.

In Monrovia, the challenge is one that faces most access centers: how do you grow effectively?

Bought from Acton Cable three years ago by Daniels and Associates, Foothills Cablevision serves Monrovia plus four other communities in the foothill area: Glendora, San Dimas, Laverne and Upland. A new studio — required by the franchise — should be ready to serve all five communities in March 1987. Only Monrovia has an access corporation in place.

Community access is facilitated through two related organizations: The Monrovia Cable Usage Corporation and the Monrovia Cable Usage Commission. The Corporation is a nonprofit which oversees all activities focusing on finances and accountability. Community Access Coordinator Sharilyn Hargraves calls the Board, "a direct feed to our main constituents."

The Board selects the nine member Commission who currently represent the arts, businesses, the high school, higher education, senior citizens, the religious community, the board of education and community producers. The Commission meets monthly and oversees the day to day operations, sets policies and procedures and is responsible for promoting the channel. "Commissioners do outreach to local clubs and

organizations. On a location shoot, a commissioner is always there to tell people about our channel."

Programming is primarily municipal plus a cross-section of shows from the community. The channel has targeted the black community and the religious community for increased participation.

Currently, the channel cablecasts live and taped city council and planning commission meetings with a high school crew. Hargraves is also trying to get the schools more involved. The Junior High School is working on a project to do a children's story by a local author. The high school is developing a Regional Occupational Program to train students in video production.

"We're developing strategies for more community support," Hargraves explains. "We're going to introduce Emmy Awards initially as recognition awards, but eventually they'll be competitive." To get more people involved, organizations that want the channel to cover an event must have representatives take the video training and produce the show. In a year, over 100 people have been trained, and there is a core of thirty active volunteers.

"We protect and pamper our producers, because we need programming," Hargraves said. There are no user fees at Monrovia, although producers buy videotape at cost.

Channel activities are supported by one percent of the gross revenues which is a portion of the five percent franchise fee. The city loaned money to the corporation to purchase equipment. Foothills Cable pays salaries and maintains the production van, which it contributed. The channel is just beginning to seek program underwriting.

Hargraves developed a five year plan for all the five communities with the goal of a fully activated studio with the channel cablecasting video programming seven days a week. The Commission recently appointed a planning committee, the first sub-committee the Commission has developed. With all the acquisition activity in the cable industry, both the Corporation and the Commission are concerned about the possibility of transfer of ownership. Hargraves says, "The Board has to posture itself so the channel won't be a victim."

plete rethinking of local programming facilities in Pasadena. The proposed modification of the high school's little theatre into a studio was deemed too expensive, as was a new mobile van to be used by the Community College.


However, the PCAC found that in the crunch they had supporters in community institutions committed to their survival. PCAC is currently evaluating a proposal from the community college for a potential studio. The City of Pasadena donated \$93,000 from the Telecommunications budget to equip a van.

Helmore continues, "My biggest concern is that we aren't real yet. Nothing is currently on the channel. You can't convince people you're real

until you're up and running. In December, when we start programming, we'll start dealing with the issues of flying rather than getting off the ground."

Despite the cutbacks, Helmore is convinced that local programming will thrive in Pasadena. Falcon representative and PCAC Board member Craig Watson created an Artist in Residency program where Artist Nancy Buchanan worked with several local groups including Kidspace, El Centro del Accion Sociale, and the Orr Heights Neighborhood Association — to produce video. These projects have already begun to inspire the creation of other programming by similar groups.

New Services for City In Del Mar

 **Foundation for Del Mar Community Television** (incorp. 1985)
Del Mar (pop. 5,100)
Daniels Cablevision franchise: 1981-1996
(1,300 subscribers)
Channels: 2 P, 1 E, 1 G

5-member Board: 1 City Council member, 1 cable company representative, 3 City Council appointees; Board is Del Mar Cable Advisory Committee

Staff: General Manager paid by Daniels Cable; Studio Supervisor, part-time Program Director; 5 paid interns

Programming: 8 hours live per month; 30 hours taped per week

Other Activities: Video training, PSAs for community groups, community bulletin board, San Diego County calendar

Operating Budget: \$26,000-\$30,000 plus in-kind cable operator contribution

San Diego's arts community has always been targeted as a key constituency to use the Del Mar Communications Center. Individual video and performance artists create highly idiosyncratic works at which other access centers might balk. The DMCC's Artist in Residency program, in which artists get free use of the Center to complete individual works, has been replicated around the country. The Communication Center has worked in tandem with local arts groups like San Diego's Sushi Gallery to engage larger audiences in the appreciation of contemporary

art. However, the Center is trying to expand its user base. According to Del Mar Communications Center Manager Stephen Reiss, "We're hoping, too, that by providing more services to the city, we will receive greater support from them in the long term."

Currently, the funding base is diverse. The cable operator pays \$2,500 per year plus \$400 per month office supplies. Daniels also provides equipment maintenance, utilities and pays the General Manager's salary. The cable contribution adds up to about \$40,000 per year, according to Reiss.

The city pays \$7,500 per year which is two percent of the operator's gross receipts, a portion of the franchise fee. The Foundation also received small grants from the Foundation for Community Service Cable Television and the San Diego County Cable Commission. An additional \$15,000 per year comes from renting the facility to commercial users three or four times a month, "although community users are always our first priority."

Fees from community producers for training, videotape and tape duplication total about \$10,000. They were unsuccessful in negotiating financial support from the high school, but Reiss maintains that the high school interns as well as the programming the high school provides are a significant contribution.

Nevertheless, the Foundation was created, in part, because the Advisory Committee believed that fundraising would be easier for a nonprofit organization. Reiss says, "Although our current funding should remain stable for the next seven years, it's crucial the Board realize there can always be changes and surprises."

One of those changes is that the city is going to build its new Civic Center on the site where the Del Mar Communications Center — a model community communications facility — now stands. Understandably, the Foundation is positioning itself to be part of the new Civic Center.

Although a municipal channel is required in the franchise, it is rarely used. Torrey Pines High School Productions tapes the city council meetings which are then cablecast over the public access channel. The Foundation is working with the City to upgrade the council chambers for cablecasting, including a press room, awning and outside monitors. The Foundation would also like to cablecast planning commission meetings and Neighborhood Watch meetings.


The Del Mar facilities are already heavily utilized. The editing facilities, for example, are booked up two months in advance. "We don't advertise," Reiss says. "But our studio supervisor generates at least one original article about us per month. And a Board member has convinced one of San Diego's top five public relations firms — Ronnie Hicks and Associates — to consult with us monthly for free. The results are stupendous. They publicized a taping, we were going to do of a gallery opening. 700 people showed up."

Del Mar businesses also use the channel. Restaurants use the calendar, and the Chamber of Commerce uses the community bulletin board to introduce new businesses to the community.

"As we get additional support from the city and provide them with additional services, the trick will be striking the balance between municipal and public access. But I'm confident we can pull it off," Reiss states. "You see, we're not confused about what we're doing. This is a business, not a playground. Users, viewers, supporters all take us seriously. And as conservative as Del Mar is, our Board is highly supportive of creativity — whether by local artists or access staff. The Board realizes that sometimes the only way you learn and grow is through trial and error."

Reiss's advice to other centers is this: "Make the facility useful and cost-effective for a number of constituencies. Encourage channel use. And whatever you do, don't write by-laws or policies that limit your ability to support your organization financially. Give your services free to the needy, but make it clear in your by-laws that you can charge the rest."

City Builds Studio In Sanger

 **Sanger Community Access Corporation** (incorp. 1983)
Sanger (pop. 14,500)
Group W franchise: 1981-1996
(1,300 subscribers)
(Sold to Consortium 1986)
34 channels, 1 P, 1 G

9-member Board: self-perpetuating
Staff: 40% of Assistant City Manager's time, part-time secretary, program director, camera person, technicians.

Programming: produces a minimum of 2 hours per week

Other Activities: training

Operating Budget: \$60,000

"The Group W sale had an interesting impact on us," Kerry Miller, Sanger's City Manager says. "We were relying on the cable operator for programming resources, so the sale could have been a discouraging blow. But instead we've made an aggressive effort to do it on our own. If the system hadn't been sold, we'd probably still be waiting for the cable company payments. We'd still be in negotiation."

As part of the 1986 Westinghouse sale of their cable interests, the Group W Sanger system was sold to the consortium of five MSO's who now own the Group W stock. The final ownership and management of the system itself is still up for bid.

Nevertheless, on November 1 the new Sanger studio will be dedicated. The facility will house not only the community programming studio, but the cable system LO facilities and a local independent station from Fresno. The facility is funded by the City of Sanger.

Miller believes that Sanger is a community where cable access can thrive. "In Sanger we have a small weekly newspaper. The only time we're on the news in Fresno is if there's an alarming crisis. Local programming can change the way the city communicates with its citizens and the way citizens communicate with each other." To nurture this new communications tool, Miller, his staff and the City Council developed a systematic long range plan flexible enough that they could respond effectively to the Group W sale.

"We're moving into the studio with a viable access operation underway. The first year we developed volunteer resources in the community. The next year we moved into programming, a half hour at a time," Miller continues.


Since January, without a studio, the Corporation has been producing at least two hours of programming a week. Currently, there are two talk shows, one in English, one in Spanish, plus an in-depth news magazine and special programs. The next step in the long-range plan is to establish a citizen's program committee to develop programming ideas and priorities independent of the corporation board.

Although the five percent franchise fee goes into the general fund, the City of Sanger has been supporting access with equivalent funding. Group W contributes an additional \$15,000, and the high school contributes \$10,000. "The school district increased their funding for access," Miller explains, "based on the studio being constructed by us." The school district also established a committee to develop a studio television production class.

The Corporation is also counting on grants and business sponsorship to yield an additional \$10,000. "Our financial goal is to make the Corporation more independent, although we don't expect it to be totally independent. We don't intend to have users' fees at first, but we are looking to sponsorships from local businesses."

Assistant City Manager Al Puentre, who is implementing the access corporation agrees. "My long term goal is for the Corporation to be 60 to 70% financially independent. The Center can't be dependent on the city. If over the next two years, there were major cuts from city's financial support, it would really hurt. Still, our greatest strength is diversity of support. I'd rather start with five and end up with fifty. Than start with fifty and end up with five."

Building Political Clout In Sacramento

 **Sacramento Community Cable Foundation** (incorp. 1984)
Sacramento, Folsom, Galt, Sacramento County
(pop. 775,000)

Scripps-Howard franchise: 1983-2003
(28,000 subscribers)
62 channels: 45 activated; 2 public, 1 education,
1 governmental, 1 public TV, 1 religious
21-member Board: elected by Foundation
members: 6 by cable subscribers, 6 by all
citizens, 6 by local organizations, 3 Board
appointees

Staff: Executive Director, Community Outreach
Director, Director of Training, Secretary,
2 Production Directors; Part-Time Grants
Director; engineer, part-time playback person
paid by Scripps-Howard; 4 paid interns from
local colleges

Programming: contracted for 33 hours per
week by 1988

Other Activities: training in cooperation with
community colleges; grants

Operating Budget: \$250,000 minimum per year

At the October 2 studio open house, over a
thousand people toured the facilities of the
Sacramento Community Cable Foundation. The
Mayors of Sacramento, Galt and Folsom, the
chair of the Cable Commission and the chair of
the Foundation board cut the ribbon. Foundation
Executive Director Randy Van Dalsen believes
this depth of community and political support is
key to his organization's success.

After the most media-scrutinized franchising
process in history, Scripps-Howard signed the
twenty-year franchise in December 1983 to bring
cable to Sacramento's 360,000 households.

According to Van Dalsen, "The franchising
authority believed Sacramento would respond
well to local programming, but they were also
concerned about First Amendment challenges
from the cable industry."

Therefore, the request for proposals did not
require applicants to provide local programming.

However, if the company was going to offer local
programming, certain key questions had to be
addressed so proposals could be compared and
evaluated. If local programming were provided,
the cable company had to establish a separate
nonprofit organization to provide programming
and manage the local facilities. The Sacramento
Community Cable Foundation is that entity.

Within five years from the franchise date, the
cable company is supposed to be providing
sixty hours per week of original programming
through contracts with the Foundation, KVIE
— the local public television station — and the
educational consortium. Under its contract, by
1988 the Foundation is required to produce 55%
or thirty-three hours per week. If the Founda-
tion doesn't produce the required program-
ming, the organization's operating funds can be
placed in escrow until a new Foundation can be
established to program the channel.

In December 1985, Scripps-Howard told the
City that they wanted to put all access com-
mitments on hold until the Preferred case was
resolved. In response to Sacramento's breach of
contract lawsuit, the company settled out of
court. Because of these renegotiations, the
Foundation experienced an eight-month delay in
getting the facilities necessary to produce the
required programming. The Foundation is now
seeking relief from contract provisions requiring
minimum levels of programming.

Programming began, however, in September
1986 with a show called "Hands-On TV," a jazz
show, and college program on disabilities. The
Foundation has entered into a unique contract
with the community colleges to provide training
for the public. The college benefits financially
through increased student enrollment. The
Foundation is able to concentrate resources on
programming and other activities, as well as
gaining additional political support. Five hun-
dred people have completed training.

Scripps-Howard is the Foundation's primary
funding source, providing an ongoing operations
grant which comes to a minimum of \$275,000
per year. Once the cable system serves 42,000
subscribers, a funding formula kicks in at \$1.
per subscriber per month for all local program-
ming. These monies will be divided among a
the Sacramento local programming groups.
Fifty-five percent of these funds are earmarked
for the Foundation. The cable operator also pays
the salaries for in-kind staff and provides and
maintains two initial equipment packages.

In addition, the Foundation collects mem-
bership dues — about \$2,000 this year — and
received a \$1,000 contribution from the dis-
banded health programming consortium to
produce health-related programming. The
Foundation also collects about \$15,000 in
interest on their grant. By 1989, the company is
projected to reach the 42,000 subscriber level at
which point the formula would kick in about one
million dollars.

Despite the resources provided under the
existing franchise, Van Dalsen and the Board are
looking to the 2003 franchise renewal, when the
provisions of the national cable act will limit
cable operator payments to the SCAF. "In ten
years the Foundation must be a major Sacra-
mento institution," Van Dalsen states, "or we
will never attract other financial support. We
must diversify funding before funding is
restructured in the post-cable act renewal
process."

Van Dalsen's advice to access centers: "If
facing renegotiations, make sure you get good
broad-based support for your organization.
Position of strength comes from community
support — especially the establishment. Without
that broad network you're in a much more
precarious position. Negotiations are only
between government and industry, not the access
foundation. If the public doesn't communicate
your organization's value to government, you're
dead in the water."

Survival Strategies for an Uncertain Age

Although communities, cable system resources and circumstances varied
wildly, five strategies emerged as key to survival:

FUNDING: An access corporation must establish a stable funding base that is
diversified enough to protect it against future political vagaries.

BOARD OF DIRECTORS: An active Board — tied closely to the community
— is essential.

SUPPORT: Through Board representation, programming, outreach and all
other activities of the corporation, broad political and community support must be
secured prior to franchise negotiations.

PARTNERSHIPS: The corporation must develop working partnerships with
major institutions within the community.

POLICIES/PROCEDURES: All governing documents must be flexible, en-
couraging growth within a clear operating philosophy.

PLANNING: A mechanism to ensure education of key players and long range
planning must be institutionalized.

California's Educational Cable Consortia

California educators have banded together in a number of consortia to garner resources during the franchising process and to share resources for effective educational utilization of cable's local channels once franchises are granted.

Because franchise areas rarely reflect school district boundaries, consortium-building makes sense for educators. Pooling resources to purchase and distribute programming, produce television, facilitate channels, undertake joint projects and take advantage of promotion opportunities make cable consortia an attractive educational option.

Although most of the consortia consist of only educational representatives, two of the organizations described below — Foothill Media Services Network and Mendocino County Community and Educational TV — include representatives from local governments and other institutions as well as educators. As Foothill Media Services Network representative Jim Delaney states, "We share a channel with other cities and schools. Through resource sharing, we all gain time, staff and equipment. And rather than having the burden of struggling to program several underutilized channels, we'll end up with an effectively programmed channel with broadbased local support."

CableScan reports on six California educational consortia — their purpose, structure and funding, and activities.

☐ Lakewood Educational Technology Consortium (LETC)

Founded: 1986

Purpose: "to effectively utilize the educational channel in Lakewood"

Members: all public school districts with schools in Lakewood: ABC Unified School District, Bellflower Unified School District, Long Beach Unified School District, Paramount Unified School District

Structure: joint powers agreement between districts; no paid staff

Funding: each district contributes to the LETC based on the number of students served.

Activities: produces a math homework assistance project; programs a 125-page character generator, funded by a grant from the City of Lakewood; cablecasts satellite-delivered Special Education Conference to member districts

Cablesystem: Simmons Cablevision in Long Beach and Signal Hill; Jones Intercable in Lakewood

Contact: Jim Henricks, Assistant Director of Instructional Resources, Long Beach Unified School District, (213) 436-9931.

☐ Telecommunications Learning Consortium (TLC)

Founded: 1983

Purpose: "to serve as a consortium of community colleges and public schools to coordinate activities of members in planning, developing and operating regional educational telecommunications delivery systems and programs."

Members: three community college districts composed of six campuses: De Anza Community College, Evergreen Community College, San Jose City College, Mission Community College, West Valley Community College

Structure: joint powers agreement. A representative and alternative from each campus serve on Board. No paid staff.

Funding: Members participate based on telecourses they use.

Activities: buy and cablecast 100 hours of telecourses to 75,000 Silicon Valley households served by four cable operators; produce occasional live interactive shows as well as campus specific programming about college activities; produce Select-A-Show, call-in service, allows students to request a show they missed or wish to see again.

Cablesystem: United Cable, Los Altos & Cupertino; TCI Sunnyvale; Gilcable San Jose; Hearst Mountain View

Contact: Mike Holler, Executive Head of TV Services, De Anza TV Center, (408) 996-4766.

☐ Sacramento Educational Cable Consortium (SECC)

Founded: informally 1972; incorporated 1982

Purpose: "to provide instructional materials to schools in Sacramento through video technology... the intent is to reach groups with specific interests and needs not available through other sources."

Members: 17 Sacramento County K-12 school districts, Los Rios Community College, California State University, Sacramento, Diocese of Sacramento, Junior Museum-Sacramento Science Center, Sacramento City Public Library, Sacramento County Office of Education, PTA, University of California at Davis, McGeorge School of Law, University of Southern California's School of Public Administration

Structure: nonprofit corporation with a Board made up of representatives from each of the member institutions; paid staff.

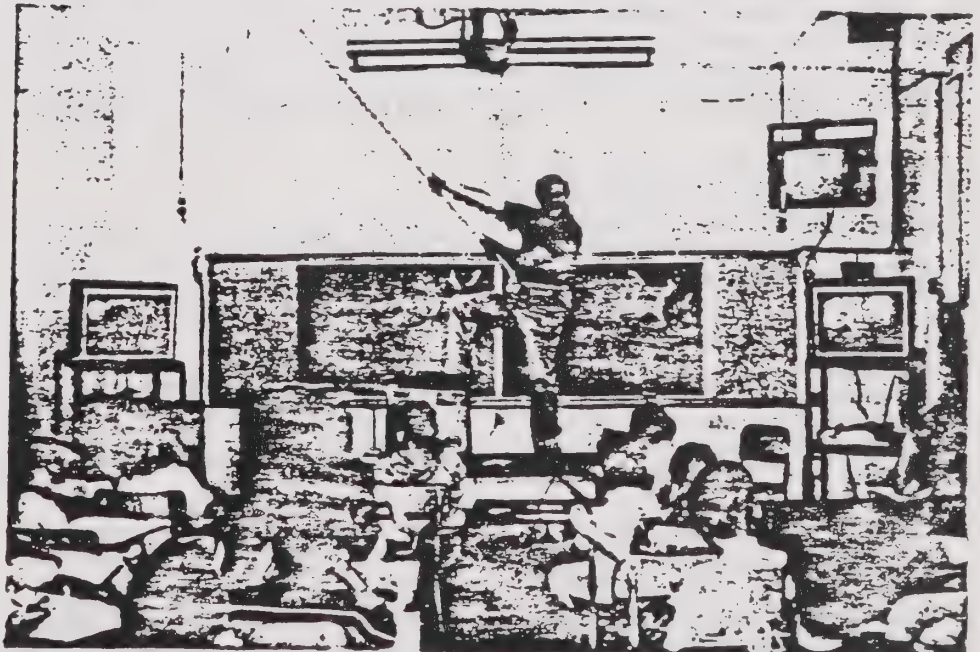
Funding: grant from Sacramento Cable required by franchise; minimal membership dues plus in-kind support from participating schools.

Activities: cablecast 50 hours of programming per week including 10-14 hours of locally produced shows; encourage member institutions to create programming; set channel policy; create year-long program schedule; provide equipment and staff

Cablesystem: Scripps-Howard

Contact: Elizabeth Rhodes, Executive Director, SECC, (916) 920-1006.

Continued on page 7



"The Art Maker." Dan Mihuta entertains and instructs a class live on cable thanks to the Sacramento Educational Cable Consortium.

Educational Uses of Cable in California

	Educational cable channel	Pre-recorded instructional TV courses	Live instructional TV courses	Student produced programming	Video conferences	Homework assistance project	Character generator announcements	Student recruitment	Promotion of school activities	Staff development	Community programming	Satellite delivered educational network	Educational programming from nonprofits, government & business
California State University, Long Beach	X							X	X				X
Diocese of Orange					X							X	
Fairfield Unified School District				X		X							
Foothill Media Services Network, Glendale Burbank, La Canada-Flintridge											X		
Joint Council for Educational Technology, Huntington Beach	X	X		X					X		X		
Lakewood Educational Technology Council	X	X			X	X	X		X	X			
Mendocino Coast Community and Educational Television				X					X		X		
Orange Unified School District	X	X		X		X	X		X	X		X	X
Peralta Colleges Television, Oakland, Berkeley, Emeryville, Piedmont	X	X	X					X	X		X	X	
Sacramento Educational Cable Consortium	X	X	X			X	X	X	X	X			
San Diego County Office of Education	X	X				X			X	X	X		X
San Francisco State University	X	X					X					X	
Telecommunications Learning Consortium, San Jose, Cupertino, Los Altos, Mountain View	X	X	X		X			X	X				X

Educational Programming Sampler

California educators are using cable to teach, upgrade staff skills, recruit students, provide public education, video-conference and publicize school activities and programs. A sampling of programming from California schools and colleges is described below.

- **The Brotherhood II** — Fon Bragg High School students create a dramatic feature, retelling a school myth that a league of adepts lives underneath the high school influencing the world of those who learn above. (Century Cable)
- **The Carson News** — A local news show produced by Carson High School Regional Occupation students in partnership with American Cablesystems.
- **Student/Seniors Videoconference** — Members of the Santa Ana Senior Citizen's Center and religion students from Mater Dei High School used the City of Santa Ana's two-way interactive I-Net to share opinions and compare values. (ComCast Cable)
- **Orange County Education Today** — A one-hour videotape highlighting the Orange County Office of Education's programs and projects was cablecast on all 17 cable systems in the county.
- **State Economics Requirement Training** — Four learning sites were used by teachers to participate in a five-session training program facilitated by the Sacramento Educational Cable Consortium. (Sacramento Cable Television)
- **The School and the Microcomputer** — Available through the Regional Educational Technology Advisory Council, this show was cablecast for Orange Unified School District teachers to have an opportunity to understand the impact of computers on education. (American Cablevision of Orange)
- **Postcards** — California State University, Long Beach, presents videotaped slide shows of unique travel adventures by University faculty and staff. (Simmons Cable; Jones Intercable)
- **This is Your Life, Ben Franklin** — Joint Council for Educational Technology taped Fountain Valley High School History Instructors John Bovberg and Bill Lacy making American biography come alive by having students play the Guest of Honor's relatives and friends. (Rogers Cable TV)
- **5.2.6: Sixty Minutes of Homework Help** — Lakewood Council for Educational Technology produces a high tech math homework assistance project, funded by a grant from the City of Long Beach. The show features a futuristic set dubbed, "Tech Central," complete with a computerized color writing tablet, computers and laser discs all loaned or donated by corporations. (Simmons Cable, Jones Intercable)
- **Speaking of Schools** — The Superintendent of San Diego City Schools presents a monthly one-hour live call-in show featuring a guest student, teacher and parent cablecast county-wide.

PUBLIC SERVICE ANNOUNCEMENT
INFORMATION KIT

[This kit was prepared by the City of Thousand Oaks to introduce the community to access programming]

Nonprofit and other service organizations do not pay a fee to air or cablecast a PSA. However, the individual radio, television or cable station determines if and when the PSA will be scheduled.

PSAs can be used to persuade or bring about action:

example #1: "Don't smoke, it's a matter of life or breath. This message brought to you by the American Lung Association."

example #2: "Friends don't let friends drink and drive. Brought to you by the Mothers Against Drunk Driving."

PSAs can be used to inform:

example #1: "Are you prepared for the big one? Get all the facts on earthquake preparedness. Call --- for your free brochure."

example #2: "Buckle up. It's the law."

PUBLIC SERVICE ANNOUNCEMENTS: How To Write A PSA Script

Suggested Time: 20 - 30 Seconds

Suggested Outline:

1. Introduction: I am (or we are) _____
representing _____
2. Background of your organization
 - a. Purpose
 - b. Activities
 - c. Members (qualifications for membership)
3. How to join or get more information
 - a. Person to contact
 - b. Phone number

In advance notify the person taping your PSA of any graphic, photo, or prop you will be using as well as the information you want to have printed on the screen (Organization name, contact information, etc.). Think of ways to avoid "talking heads." An art organization could focus on a set of paint brushes or a painting. A service organization might show two hands working on a mailing. A lively video clip of your organization's clients or an effective photo with a voice over might communicate more than a talking head.

PUBLIC SERVICE ANNOUNCEMENT FORM

Name of organization_____	Subject of PSA_____
Address_____	Start Date_____
Phone_____	Stop Date_____
Contact Person_____	Run Time_____

WHAT YOU SEE_____	WHAT YOU HEAR_____
-------------------	--------------------

10:-----

20:-----

SAMPLE PSA

Name of organization	City of 1000 Oaks	Subject of PSA	Public Access
Address	2150 W. Hillcrest, 1000 Oaks	Start Date	November 8, 1989
Phone	805-497-8611, ext. 200	Stop Date	January 1, 1990
Contact Person	Shirley Cobb	Run Time	:30 (30 seconds)

WHAT YOU SEE_____	WHAT YOU HEAR_____
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The stage is dark and one spotlight is lit, hitting the front of the stage floor. The narrator is at the back of the stage. The narrator begins walking forward.	Are you a member of a Conejo Valley club or service organization? Do you feel like the community is in the dark about your activities and events? Now there's a way to enlighten them. Public access television provides an avenue for spotlighting community activities, news and events at no cost. With a few free classes of instruction, you can make your own video and show it in 70,000 homes throughout the Conejo Valley. So step into the spotlight and find out more about how public access television can help you enlighten your community. For more information, call 805-497-8611, ext. 200
--	--

10:-----

Narrator steps into spotlight.

20:-----

HOW TO TALK TO A CAMERA

Here are some hints which professional TV performers use on camera.

SUGGESTIONS: Wait for a cue to begin. Talk into the lens of the camera. Use your normal tone of voice unless you are doing a characterization. When you are finished talking, continue to look into the lens until you are told that the videotape recorder has been stopped.

MAKEUP: In most cases, a natural look is preferred on TV. Makeup is usually unnecessary for men unless a play is being enacted. Women should use standard street makeup. The basic foundation or color should match natural skin tones. Cool foundation colors are preferred. Reflection can be toned down by pancake or translucent powder.

CLOTHING: TV tends to add weight. Slimming styles are advisable. Horizontal lines and baggy clothing should be avoided. Try to harmonize colors of clothing with the set. Avoid the same color as the set. Avoid a black and white print. Avoid glossy and highly reflective materials. Wear pastel shirts, not white, with dark suits. Avoid patterns that are highly contrasting, textured, or very detailed patterns too detailed. Wear as little jewelry as possible. Avoid reflecting jewelry such as rhinestones. Avoid tie pins which may interfere with lavalier microphones.

 * APPENDIX D - 5 *
 * LIST OF COMMUNITY WORKSHOP ATTENDEES *

Shiraz

Abbott, Wayne
 Telegraph Ave Residents Assoc.

Al-yassin, David

Baker, Jeff Facilities Mainten.
 City of Berkeley

Barcroft, Taylor Publisher - Editor
 Future Media

Belsky, Gloria Director
 Media Center

Benioff, Barry TV Coordinator
 City of Hercules

Bickel, Nancy Chairperson
 Cable Television Task Force

Blackston, Oji Executive Producer
 FAD Productions

Brondz, Sam

Brown, Charles M. Video Engineer
 Berkeley Video Engineering

Butcher, B. J.

Chandler, Ann Councilmember

Clark, Michael

APPENDIX D - 5
LIST OF COMMUNITY WORKSHOP ATTENDEES

Davis, Russell
3PS

Dickinson, Ralph

Doyle, Tim Aaron TV Instructor
BHS Performing Arts

Dress, Kathrin W.
Western States Legal Found.

Drori, Ellen
Berkeley Historical Society

Elam, Gene Producer
Network Video Productions

Endsley, Steve Dept. of Finance
City of Berkeley

Farrell, Maureen Co-Owner
Waveform Video

Farwell, Gary Mayor's Aide
City of Berkeley

Fine, Emily

Fogerty, Dave

Forsling, Richard

Foster, Warren
FAD Productions

Fuller, Edna
Berkeley Commission on Aging

Gee, A.

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APPENDIX D - 5
LIST OF COMMUNITY WORKSHOP ATTENDEES

Gelb, City of Berkeley	Marge	City Attorney's Off.
Glenn, KPFA-FM	Al	KPFA Producer
Goldfarb,	Alan	Councilmember
Goldstern, City of Berkeley-Cit. Bud. Com	Neil	
Gonsalves, Pink Noise Studios	Bob	Owner
Goodman,	Dorothy	
Gordon, City of Berkeley	Sean	City Manager's Off.
Goss, Cable Television Task Force	Bob	
Grant,	John Angell	Cable Producer
Grier,	D.	
Haeg, City of Berkeley-Rec. Office	Frank	
Hancock,	Loni	Mayor
Harmon, mOdm Artworks	Melissa	
Hayner,	Genevieve M.	
Helpirn, WILPF	Rose	

APPENDIX D - 5
LIST OF COMMUNITY WORKSHOP ATTENDEES

Henderson, Anne
Budget Commission

Hennig, Kai Co-Owner
Waveform Video

Herbert, Victor
Berkeley Despute Reso. Serv.

Hernandez, Jennifer
Cable Television Task Force

Houton, Laura
Access Video

Huber, Gloria
Elmwood Institute-Berk. Circle

Jacobs, Julie

Jacobson, Connie
City of Hercules

Jepson, Steve
MetaVideo

Jones, Andreas

Karp, David
Access Video Productions

Kay, Larry

Kealoha Blake, Paul President
Media Center

Kurt, Wayne
Media International

Kurtz, Wayne
East Bay Media Center

APPENDIX D - 5
LIST OF COMMUNITY WORKSHOP ATTENDEES

LaBelle, Francis
Elmwood Neighborhood Assoc.

LaBelle, Mary Jane
Elmwood Neighborhood Assoc.

Labukn, A.
1st Unitarian Church, Berkeley

Lingham, Reginald

Lipton, Carol

Marrs, Lee
Civic Arts Commission

McCain, Donna
City of Richmond

McClintock, Pat
Cable Television Task Force

McCord, Ellen
Art & Education Media

McGrath, Mike Press

McKechnie, Marie City Clerk
City of Berkeley

Miletich, George

Miranda, Mario Owner
First Place Productions

Morland-O'Hehir, Laura

Morris, Catherine
Morris & Assoc.

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APPENDIX D - 5
LIST OF COMMUNITY WORKSHOP ATTENDEES

Morrow, Claudia
Berkeley Human Rights Comm.

Nicholson Kern, Nancy

Nicoloff, Alex

Pearson, John

Perry, Hayden
Redwood Gardens Co-op

Pietso, Robert
Fredric's Electric

Pine, Evelyn
Community Memory

Rabkin, Anna City Auditor
City of Berkeley

Reineccios, Stacey
T.O.D.

Renne, Suzanne

Robbin, Anne City Auditor
City of Berkeley

Robbin, Dan
Berkeley Dispute Recon. Serv.

Robbino, Reneta

Roderigue, Fred

Sacks, Larry

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APPENDIX D - 5
LIST OF COMMUNITY WORKSHOP ATTENDEES

Sanders, SBND	Barbara	
Scherln,	Berndt	
Schimmel,	Nancy	
Schindler, Daily Cal	Todd	
Schmidt, S.F. Community TV	Martha	Executive Director
Segal, Images of Men & Women	Betty	
Shafu,	Margo	
Sheffield,	Susan	
Silver, Holocaust & Oral History Proj.	Lani	Cable TV Producer
Smith, KALX Radio	Will	
Solley,	Robert	
Solorio, T.O.D.	Robert	
Spring, Cable Television Task Force	Dona	
Sweet,	Maral	
Sylvester,	Duncan	

APPENDIX D - 5
LIST OF COMMUNITY WORKSHOP ATTENDEES

Tannenbaum, Peter
Telegraph Ave Residents Assoc.

Togami, Nancy

Turitz, Eugene
Civic Arts Commission

Vapour, Mel Vice President
Media Center

Wahl, Bernt
BMUG

Walker, Pamela
East Bay Media Center

Washburn, Pat Teacher
BUSD

Wenzel, Lisa D.

Wheeler, Kenya

Wise, Ricia
B.H.S Video Club/Class

Zukas, Hale

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CABLE TELEVISION NEEDS ASSESSMENT
COMMUNITY SURVEY

(The City of Berkeley has retained the consulting firm of Communications Support Corps to conduct a study of the cable related needs of the community. The information from this survey will be included in the final report to the City. Your responses will be kept confidential. Thank you for participating.)

Name (Optional) _____

Address _____

Telephone _____

1. Are you a cable subscriber in Berkeley?

----- YES

----- NO

----- Subscribed in the past

If you are or have been a subscriber, please comment on the cable service you have received (use the back if more space is needed):

2. Do you view Bay Cablevision Programming Network Channel 28?

----- At least once a week

----- Monthly

----- Periodically

----- Never viewed

(If you are NOT representing an organization, you may skip to question #11.)

3. Organization -----

4. Number of people served annually -----

5. What is your organization's primary service area?

----- Arts & culture	----- Media	----- Environmental
----- Social Services	----- Political	----- Civic/Social
----- Religious	----- Business	----- Sports
----- Health		
----- Other (please describe)	-----	

6. Describe your organization's major activities/programs.

7. What is your organization's budget level?

----- \$0 - 25,000	----- \$251,000 - 500,000
----- \$26,000 - 100,000	----- \$501,000 - 1,000,000
----- \$101,000 - 250,000	----- Over \$1,000,000

8. Does your organization educate or involve the public through:

----- Performances	----- Radio/TV	----- Workshops/classes
----- Forums	----- Lecture	----- Publications
----- Other (please describe)	-----	
----- No public activities		

9. How do people find out about your organization and its activities?

----- Newspaper	----- Word of mouth	----- Speaking engagements
----- Radio	----- Phone book	----- Television
----- Mailings	----- Other (please describe) -----	

10. In the last year has your organization had any coverage on:

----- Radio	----- Broadcast TV	----- Cable TV
-------------	--------------------	----------------

If so, on what station(s)/channel(s)? -----

11. Have you or your organization ever:
----- produced a television program or PSA?
----- or had one produced for you?

12. Have you or your organization ever produced or tried to produce a program at Bay Cablevision's studio in El Cerrito?

----- NO

----- YES If Yes, what was your experience?

13. Do you currently own any of the following video production equipment or facilities?

----- 1/2" VHS camera ----- 3/4" camera ----- 1/2"S-VHS camera
----- Betacam camera ----- Production Studio
----- Editing equipment ----- Other -----

14. Do you have access to someone else's equipment or facilities?

----- 1/2" VHS camera ----- 3/4" camera ----- 1/2"S-VHS camera
----- Betacam camera ----- Production Studio
----- Editing equipment ----- Other -----

If so, whose: -----

15. Do you or any of your organization's staff or volunteers know how to use video equipment?

----- YES

----- NO

16. If Berkeley had a community access channel, local organizations and individuals would be able to deliver their messages to the community by using the Berkeley's cable television system. This could be accomplished in a variety of ways. Which of the following methods might you or your organization be interested in using?

----- Posting announcements on a video bulletin board.

----- Having a pre-recorded videotape played back over the cable system at no cost.

----- Being a guest or resource person on a program.

----- Receiving video production training and using the equipment to produce your own television show.

17. If a 12 - 16 hour course on how to use video equipment to produce your own television show were offered, how many people in your organization might be interested in receiving the training?

----- If it were free: ----- none ----- 1 or 2 ----- 3-5 ----- over 5
----- If it cost \$20.00: ----- none ----- 1 or 2 ----- 3-5 ----- over 5
----- If it cost \$40.00: ----- none ----- 1 or 2 ----- 3-5 ----- over 5

18. My organization would like to use cable television to:

- Reach a wider audience with our services/programs.
- Inform the community about an issue or topic.
- Cover community cultural or social events.
- Provide entertainment.
- Promote our image in the community.
- Attract more members/customers/clients.
- Promote social change.
- Target programming towards specialized audiences.
- Train staff/volunteers/members.
- Other (please specify) -----

19. If there were an access channel devoted to the city of Berkeley, what kinds of programming do you think would be the most valuable to the community?

- City Council and governmental meetings and hearings
- Live call-in programs or forums
- Children's programs
- Multi-lingual programming
- Educational programming
- Telecourses
- Cultural events
- Community events
- Events on the UCB campus
- Programming to serve other targeted audiences (ex., seniors, hearing-impaired, African Americans, etc.: -----)
- Other (please describe) -----

We would appreciate any other comments you may wish to offer.

THANK YOU FOR YOUR ASSISTANCE!

CABLE TELEVISION NEEDS ASSESSMENT COMMUNITY SURVEY RESULTS

This is a summary of the 78 needs assessment surveys received. The surveys were distributed at all needs assessment workshops and to individuals upon request. The data below indicates the number of responses given to each question. Attached are the Summary of Comments from Surveys and Letters and Program Suggestions for Public Access Channel Tallied From Interviews.

1. Are you a cable subscriber in Berkeley?

42 YES
27 NO
8 Subscribed in the past.

2. Do you view Bay Cablevision Programming Network Channel 28?

6 At least once a week
1 Monthly
28 Periodically
28 never viewed

(Only representatives from organizations, not individuals, responded to questions 3 - 10.)

Summary of responses to questions number 3. - 7.

TYPES OF ORGANIZATIONS

22 Community
9 Video Companies/Producers
4 City of Berkeley/Commissions
3 Neighborhood/Co-ops
1 Berkeley High School
1 Radio Station
2 East Bay Media Center
30 Consumer/no affiliation given

SIZE OF BUDGET OF ORGANIZATIONS

<u>18</u> \$0 - 25,000	<u>2</u> \$251,000 - 500,000
<u>10</u> \$26,000 - 100,000	<u>1</u> \$501,000 - 1,000,000
<u>2</u> \$101,000 - 250,00	<u>1</u> More than 1,000,000

8. Does your organization educate or involve the public through:

<u>10</u> Performances	<u>13</u> Radio/TV	<u>26</u> Workshops
<u>20</u> Forums	<u>12</u> Lectures	<u>23</u> Publications
<u>16</u> Other		
<u>0</u> No Public Activities		

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CABLE TELEVISION NEEDS ASSESSMENT - COMMUNITY SURVEY RESULTS

Page 2

9. How do people find out about your organization and its activities?

<u>31</u> Newspaper	<u>36</u> Word of mouth	<u>24</u> Speaking engagements
<u>12</u> Radio	<u>16</u> Phone Book	<u>13</u> Television
<u>39</u> Mailings	<u>14</u> Other	

10. In the last year has your organization had any coverage on:

<u>19</u> Radio	<u>12</u> Broadcast TV	<u>9</u> Cable TV
-----------------	------------------------	-------------------

11. Have you or your organization ever:

22 Produced a television program or PSA?
7 or had one produced for you?

12. Have you or your organization ever produced or tried to produce a program at Bay Cablevision's studio in El Cerrito?

60 NO
4 YES If yes, what was your experience?
Only 3 (three) listed experiences -
2 Equipment inadequate
1 Difficult to access

13. Do you currently own any of the following video production equipment or facilities?

<u>18</u> 1/2" VHS camera	<u>3</u> 3/4" camera	<u>6</u> 1/2" VHS camera
<u>1</u> Betacam camera	<u>17</u> Production studio	
<u>9</u> Editing equipment	<u>8</u> Other	

14. Do you have access to someone else's equipment or facilities?

<u>15</u> 1/2" VHS camera	<u>9</u> 3/4" camera	<u>9</u> 1/2" VHS camera
<u>2</u> Betacam camera	<u>17</u> Production studio	
<u>18</u> Editing equipment	<u>19</u> Other	

If so, whose:

<u>1</u> El Cerrito Studios
<u>9</u> Friends
<u>4</u> East Bay Media Center
<u>2</u> Bay Area Video Coalittion
<u>1</u> San Francisco City College production studios
<u>1</u> Viacom Channel 25
<u>1</u> Peralta College
<u>3</u> UC Berkeley
<u>6</u> Private production studios
<u>2</u> Other producers

CABLE TELEVISION NEEDS ASSESSMENT - COMMUNITY SURVEY RESULTS

Page 3

15. Do you or any of your organization's staff or volunteers know how to use video equipment?

47 YES
17 NO

16. How might you or your organization be interested in using a community access channel?

56 Posting announcements on a video bulletin board.

53 Having a pre-recorded videotape played back over the cable system at no cost.

54 Being a guest or resource person on a program.

51 Receiving video production training and using the equipment to produce your own television show.

17. If a 12 - 16 hour course on how to use video equipment to produce your own television show were offered, how many people in your organization might be interested in receiving the training?

If it were free: — none 16 1 or 2 19 3 - 5 15 over 5
If it cost \$20 : — none 22 1 or 2 15 3 - 5 7 over 5
if it cost \$40 : 2 none 25 1 or 2 6 3 - 5 7 over 5

18. My organization would like to use cable television to:

40 Reach a wider audience with our services/programs.

43 Inform the community about an issue or topic.

34 Cover community cultural or social events.

27 Provide entertainment.

25 Promote our image in the community.

28 Attract more member/customers/clients.

40 Promote social change.

28 Target programming towards specialized audiences.

21 Train staff/volunteer/members.

9 Other (please specify):

- 1 "Share our problems/solutions with Berlin, Nicaragua and other places that can benefit both parties."
2 "Develop programs"
1 "TV Arts, Increase community interaction and communication."
1 "We'd like to use cable or fiber to deliver our services."
1 "Educate the community re: media."
2 "Produce and edit theatrical productions."

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CABLE TELEVISION NEEDS ASSESSMENT - COMMUNITY SURVEY RESULTS

Page 4

19. If there were an access channel devoted to the city of Berkeley, what kinds of programming do you think would be the most valuable to the community?

- 56 City Council and governmental meetings and hearings.
- 40 Live call-in programs or forums.
- 38 Children's programs.
- 28 Multi-lingual programming.
- 41 Educational programming.
- 30 Telecourses.
- 55 Cultural events.
- 58 Community events
- 37 Events on UCB campus
- 37 Programming to serve other targeted audiences (ex seniors, hearing-impaired, African Americans,, etc:
Substance abusers, disabled, yoga students, vegetarians, Asian Americans, youth.
- 19 Other (please specify):

"None. KQED is enough."

"Alternative, unbiased coverage of news events and social events!!!
As well as music and other arts."

"` Alternative' media, reporting, art video, etc."

Election debates, candidates issues.

"Perhaps a dispute resolution clinic in the afternoon or evening.
Special programs on typical types of disputes: noise, trees crossing property lines, etc.. How to work with your neighbor to resolve disputes."

Data transfer, non-video services, two way services..

Travelogues.

Teleconferences

"Programs devoted to local video art, video animation, experimental video - projects that don't have much of an outlet to be shown at this point."

"Please offer performance opportunities for children. This is a real need. We want our children to be involved in positive activities that build skills such as team work. Sports are fine but not all children like sports. Children are very motivated to be on TV. I would like to see children's theater projects televised. Also variety shows for kids to show their skills with dance groups, bands and performance ensembles, baton twirler, etc. I think it is appropriate to allow local commercial dance and music studios to participate along with voluntary groups such as camp fire, scouts, etc."

CABLE TELEVISION NEEDS ASSESSMENT - COMMUNITY SURVEY RESULTS
Page 5

19). Continued...

Political debates at election times.

"I would like to develop a program for teenagers to produce and air programs. In addition, to be able to have access to cable for high lighting City Recreation Services."

Community arts i.e. dance, video, music.

Support community dialogue re: community debate over community issues.

Specialized programs

Art, specialized programs

Political group forums

Jobs, local performances, housing, opportunity, problem solving

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**SUMMARY OF COMMENTS FROM SURVEYS AND LETTERS
BERKELEY NEEDS ASSESSMENT**

<u>COMMENTS</u>	<u>NEGATIVE REMARKS</u>	<u>POSITIVE REMARKS</u>
<u>Customer Service:</u>		
Phone Responses/Time	16	1
Customer Service Representatives	7	1
Information (accuracy)	5	
Office Location	1	
Response Time to Problems	9	1
<u>Billing:</u>		
Billing Errors	9	
Billing Rates	12	1
<u>Marketing:</u>		
Sale of Unwanted Serv.	3	
Refusal to Honor Special Offers	1	
<u>Repairs/Service Calls:</u>		
Service Schedules	2	
Missed Service Calls	2	
Technicians	3	
Work Quality	4	
<u>Technical:</u>		
Reception Quality (Picture)	13	4
Reception Quality (Audio)	6	
Outages/Down Time	5	
Equipment Changes	2	
Upgrades		1
<u>Access : Channel 28:</u>		
General Quality	4	
Equipment Quality	4	
Studio Location	2	
Staff Attitude/Training	1	
<u>Programming:</u>		
Range of Programs	12	3
Channel Changes	8	1
Channel 29 Reception Quality	4	
Cancellation of Channels 10 & 40	3	
Cancellation of Station WWOR	1	
<u>City's Response to Information:</u>		
Will Information Gathered Be Acted Upon or Used?	1	

<u>COMMENTS</u>	<u>NEGATIVE REMARKS</u>	<u>POSITIVE REMARKS</u>
<u>Overall Service Quality:</u> (No Specifics Given or Sited)	4	10
<u>Survey:</u> Surveys aimed to organizations not Consumers	3	

RECOMMENDATIONS:

- * "Monthly program guide for Berkeley Channel with articles and information to help organizations develop programs for community access channel."
- * "Set up public viewing areas (i.e., Libraries, UCB campus) to allow non-subscribers to view public access channels and programs."
- * "Set up a local and international tape, film and program exchange program."
- * "Set up a channel for unpopular views."
- * "An after hours "hot line" for explanations and information on reception problems and outage and down time problems."
- * "Place a tax on sales made on Shopping channels and Religious Channels to benefit the local economy."
- * "Bay Cablevision should carry public access channels from other communities in the bay area since interests and concerns are often shared by all."
- * "I love the possibilities of Berkeley developing its own TV station to give voice to a truly unique American community."
- * "If you run this new outfit like Bay Cablevision runs theirs, I want nothing to do with it!"
- * "I would like to see a monthly program guide for the Berkeley channel which has articles about public access programming and networking for organizations that want to develop programming for their organization. Since only 30% of Berkeley residents have cable, there should be public cable viewing areas at, let's say, the libraries and UCB and city buildings so non-cable subscribers in Berkeley can watch programs."
- * "We need to remember that we're dealing with a huge conglomerate who has the power to change the rules, laws, etc.. How about a Berkeley based non-commercial cable station and production studio, to be financed through taxes, similar to library funding, available at no charge?"

TO: Wally Siembab, Team Leader
Cable TV Consultants to the City of Berkeley

Participants
Education and Cable TV Worksessions

FROM: Kathleen T. Schuler

DATE: July 2, 1990

RE: CABLE TV UTILIZATION BY BERKELEY EDUCATIONAL INSTITUTIONS

I. BACKGROUND:

As part of the Community Needs assessment the consulting team focussed on Berkeley's educational community. Individual interviews were conducted and two worksessions were held (April 10 and June 21) with representatives from UC Berkeley, Berkeley Unified School District, Vista College and Peralta Community College. (See attached list of participants)

The goals of the educational needs assessment were to identify current cable-related activities, to explore the potential utilization of cable TV by these institutions, to develop recommendations for any new franchise agreement, and to encourage continued planning among the three institutions.

This paper summarizes the findings from the interviews and worksession discussions. Please refer to the Minutes of the April 10 and June 21 meetings and the interview notes for additional information.

Although the participants reviewed draft #1 of the report at the June 21 meeting, this report does not reflect the formal position of any of the participating institutions.

II. PROGRAMMING NEEDS

PROGRAMMING CATEGORY	BPS	UCB	VISTA/PERALTA
TEXT SERVICES:			
"Bulletin Board"	XX	XX	XX
VIDEO SERVICES:			
General Information to Home	XX	XX	XX
Special Events to Home	XX	XX	XX
Access to Curriculum Materials	XX		XX
Curriculum to Classroom	XX		XX
Curriculum to Dorms		XX	
Instruction to the Home (incl. Homework Assistance)	XX		XX
Telecourses			XX
Contract Education		XX	XX
Teacher Training	XX	XX	XX
In-house communications	XX		XX
Teleconferencing	XX	XX	XX
OTHER:			
Data Transfer (to dorms)		XX	
Download instructional materials	XX		

III. CABLE-RELATED PRIORITIES

1. SHARED BY ALL INSTITUTIONS:

- Enhancing the cooperation among the three major educational institutions overall through a readily accessed cable network.
- Allowing greater access by all educational institutions to existing resources: UCB's teleconferencing, PCTV microwave interconnect, VISTA's electronic library, etc.
- Allowing greater coordination of existing programs: disaster preparedness, teacher education, services to students, etc.
- Developing more resources: expanding teacher training, employee training, developing new curriculum, enhancing curriculum materials, etc..

- e. Bringing the resources and events of the schools to the entire community.
- f. Coordinating and expanding efforts to bring and keep in the educational systems those now under-represented, underserved.
- g. Participating in an educational consortium to coordinate the use of cable television

2. UC BERKELEY:

- a. Making the resources of UCB campus available to other schools and to the community: teleconferencing capabilities, radio training, teacher training, instruction, performances and guest lecturers, etc...
- b. Wiring the Dorms/Learning Centers for video and data communications.
- c. Working cooperatively with other educational institutions (ex., Department of Education and BUSD, Lawrence Hall of Science and individual schools) in teacher training, special instruction).
- d. Delivering contract education in the Bay Area region.
- e. Expanding the training, programming and outreach of the campus radio station.
- f. Working with Peralta and Vista to provide training for UCB's 15,000 employees and career education to students.
- g. "Community Radio" (see proposal submitted under separate cover.)

3. VISTA COLLEGE/PERALTA COMMUNITY COLLEGE DISTRICT

- a. Delivering telecourses to the Berkeley community (Vista) and to the College District communities (PCTV).
- b. Linking Vista to Peralta's expanded microwave interconnect for innhouse communications and expanded delivery of instruction.
- c. Delivering contract education services to the local government and the private sector, especially small and medium sized business and delivering services to small businesses by the Center for International Trade and Development, which has been recently placed at Vista.

- c. Enhancing the concurrent enrollment program between Vista and BHS.
- d. Maintaining PCTV programming and delivery.
- e. Participating in joint curriculum development (including hypercard development) and instruction delivery with UCB.
- f. Participating in teleconferences locally, nationally and internationally.
- g. Developing videotext services to expand the delivery of information on health, etc..

4. BERKELEY PUBLIC SCHOOLS

- a. Finding cost-effective means of serving Berkeley students and their families.
- b. Increasing access to instructional materials (ex., access to cable programming services like CSPAN, CNN, Discovery; cooperation with Lawrence Hall of Science; ability to download video materials from Media Services; access to electronic libraries at Vista, etc..)
- c. Delivering advanced or specialized instruction to the classroom.
- d. Reaching parents with informational and educational programming.
- e. Providing teacher training (including cooperative efforts with UCB) and improved inhouse communications.
- f. Participating in local, national and international teleconferences.
- g. Expanding the adult ed, ESL, and vocational ed programs, including video production training.
- h. Delivering student productions and special events to the home.
- i. Cablecasting of School Board meetings, addresses by the Superintendent, etc..

IV. RECOMMENDATIONS FOR THE FRANCHISE AGREEMENT:

- 1. Signal Reliability/Clarity on All Channels.
- 2. Universal Build of the system, including all residential areas, the downtown and west end businesses and the UC dorms.

3. Connect all Vista College and Berkeley Public School sites and administration buildings to the consumer cable system to ensure access to the PEG channels and to other programming services such as news, sports, and so on.
4. Adequate channel capacity to accommodate current and future educational programming. Specifically, the educators requested 5 channels be set aside: 2 reserved for and managed by PCTV, and 3 managed by an educational consortium for (1) telecourses, (1) general education and community services and (1) for contract education on a "pay per view" basis. The number of channels could be phased in as utilization increases. One or more radio channels should be provided. The educational programming should not be carried on the public access channel.
5. Adequate production facilities and equipment. The group will meet again to further refine equipment and facilities needs. Initial recommendations include:
 - a. Production and post-production equipment to be available to BPS, including a video production facility to be located at BHS for student training and productions
 - b. A headend established at the UCB Media Services Center to deliver programming directly to the dorms, Learning Centers and to the community.
 - c. Facilities should have baseline equipment for live call-in programming.
 - d. Multiple sites for the delivery teleconferences by UCB.
 - e. A microwave connection between Vista College and PCTV to complete the Peralta interconnect.
 - f. Remote equipment and switcher to tie PBS into the Peralta interconnect.
6. One upstream channels should be allocated to permit interactive instruction, the direct delivery of programming and instruction from the UCB campus, two-way teleconferencing, and "public service pay per view" for contract education.
7. One or more educational channels should be interconnected with Bay Cablevision service area and with other cable companies in the Bay Area for the delivery of telecourses and contract education.
8. An Institutional Network (INET) should be considered for data transfer within and among the educational institutions and for use by local government as well as for closed circuit instructional programming, communications and staff training.

PARTICIPANTS: EDUCATIONAL NEEDS ASSESSMENT

Contact Information

Involved in:

Dr. Barbara Beno, President
Vista Community College
2020 Milvia St.
Berkeley, CA 94704
841-8431 xt. 214

Interview, Meeting 1 & 2

Bob Cremer, Associate Director
Radio and TV Service
UC Berkeley
9 Dwinelle Hall
Berkeley, CA 94720
643-9577

Interview, Meeting 1 & 2

Marvin Eckard, Assoc. Director
Communications Services
Transportation and Communications Division
UC Berkeley
2505 Channing Way Room 1
Berkeley, CA 94720
642-3301

Interview, Meeting 1

Pat Ensley, Manager
Instructional Services
Berkeley Public Schools
2134 Martin Luther King Way
Berkeley, CA 94704
644-6078

Interview

Roger Ferragallo, Consultant
Office of Telecommunications
Peralta Community College District
333 East 8th Street
Oakland, CA 94606
466-7267

Interview, Meeting 1 & 2

Alan Goldstein, Librarian
Library Media Services
Berkeley High School
2246 Milvia St.
Berkeley, CA 94704
644-6847

Meeting 1

Anton Jungherr, Associate Supt.
Business Services
Berkeley Public Schools
2134 Martin Luther King Jr. Way
Berkeley, CA 94704
644-6674

Meeting #2

PARTICIPANTS: EDUCATION NEEDS ASSESSMENT

PAGE 2

Peter Kerner, Director
Office of Media Services
UC Berkeley
9 Dwinelle Hall
Berkeley, CA 94720
642-2535

Interview, Meeting 1

Maureen Knightly, Asst. Dean
Vista Community College
2020 Milvia St.
Berkeley, CA 94704
841-8431

Meeting 1 & 2

Scott MacFarland, Supervisor
Instructional Media Center
Berkeley Public Schools
1835 Allston Way
Berkeley, CA 94704
644-6183

Interview

Virginia Penikis, Director
Office of Transportation and Communications
University of California, Berkeley
2505 Channing Way Room 1
Berkeley, CA 94720
642-3301

Interview, Meeting 2

Norman Thompson, Administrator
Master Plan Committee, Office of the Superintendent
Berkeley Public Schools
1950 Carlton St. D3
Berkeley, CA 94704
864-8749

Meeting 1 & 2

* APPENDIX D - 9 *
* LIST OF AT RISK YOUTH WORKSHOP ATTENDEES *

Baltimore, Sheila
Berk/Albany Recovery Center

Brown, Pee Wee
COB/YAP

Evans, Marilyn
Veterans Assistance Center

Fitz, Sonja
Berk/Oakland Support Services

Merritt, Kay
UAC Veterans Assistance Center

Pitre, Patricia
COB/Young Adult Project

Taylor, Larry
COB/YAP

Wagner, Lee
Nia House Learning Center

Williams, Nikki
BNSP/BYA

 * APPENDIX D - 10 *
 * LIST OF COMMUNITY ACTIVIST WORKSHOP ATTENDEES *

Bartlett, Dayle City Council Aid
 City of Berkeley

Beno, Dr. Barbara President
 Vista Community College

Farwell, Gary Mayor's Aide
 City of Berkeley

Judith, Elya
 Urban Ecology

Marrs, Lee
 Civic Arts Commission

Richman, Rachel Administrative Aide
 Assemblyman Tom Bates Office

Shiver, David
 Ace Berkeley Coalition

Spring, Dona
 Cable Television Task Force

Wadleigh, Pat President
 League of Women Voters

 * APPENDIX D - 11 *
 * LIST OF INTERVIEWEES *

Beno , Vista Community College	Dr Barbara	President
Bickel , Cable Television Task Force	Nancy	Chairperson
Brown , City of Berkeley	Michael	City Manager
Brunetti , Berkeley Fire Department	Jim	Deputy Fire Chief
Burcham, Esq. , Berkeley Chamber of Commerce	Thomas	President
Cheema , Berkeley/Oakland Supp. Ser.	Boona	Executive Director
Cole , Cal Performances	Robert	General Director
Coleman , Personnel Dept. - Berkeley	Linda	Training Director
Cremer , UCB Media Services	Bob	Assoc. Director
Dawson , Berkeley Police Department	Dorrie	Neigh. Serv. Liason
DeBode , UCB Telecommunications Office	Joe	Manager
Eckard , UCB Communication Services	Marvin	Assoc. Director
Endsley , City of Berkeley	Steve	Finance Department
Ensley , Berkeley Unif. School Dist.	Pat	Mgr.Instruction Serv

APPENDIX D - 11
LIST OF INTERVIEWEES

Evans , Kathy
Ecology Center

Falwell , Gary
City of Berkeley

Farrington , Carl
Community Memory

Ferragallo , Roger
Peralta College District

Gong , Stephen
Pacific Film Archives

Gordon , Sean
City of Berkeley

Grant , John
Berkeley Fire Department

Haeg , Frank
City of Berkeley

Hancock , Loni
City of Berkeley

Hernandez , Frank
Contra Costa College

Hiatt , Ray
Berkeley Fire Department

Ingraham , Ken
Drug Program, City of Berkeley

Kakishiba , David
Berkeley Asian Youth Center

Kerner , Peter
UCB Media Servies

Koehler , Carol
Alta Bates/Herrick Hospital

Lassey , Victor
City of Oakland

Director

Mayor's Aide

President

Consultant, Telecom

General Manager

Assist. to City Mgr.

Emergency Serv. Mgr.

Dir. of Recreati

Mayor

Director of Telecom.

Fire Marshall

Director

Executive Director

Director

Media Ser. Manager

Cable TV Coordinator

APPENDIX D - 11
LIST OF INTERVIEWEES

Lewis , Center For Ind. Living	David	Comm. Rel. Coord.
Liljenwall ,	Jim	Community Activist
Lyles , Berkeley Police Department	Reginald	Lt.
MacFarland , Berkeley Unif. School Dist.	Scott	Supervisor Media Cnt
Mayer , Office Economic Development	Neil	Director
McGuire , Bay Cablevision	Andy	Production Manager
McKechnie , City of Berkeley	Marie	City Clerk
Mead , City of Berkeley	Christopher	Info. Service Mng.
Medrano , Berkeley Mental Health Admin.	Fred	Director
Menudri , City of Berkeley	Regina	Head Librarian
Nemcik , Community Memory	Tom	Executive Director
Newby , Bay Cablevision	John	Marketing Manager
Penikis , UCB Off. Transport. & Comm.	Virginia	Director
Petari , Black Oak Books	Don	Staffperson
Porkorny , City of El Cerrito	Gary	City Manager
Rabkin , City of Berkeley	Anna	City Auditor

APPENDIX D - 11
LIST OF INTERVIEWEES

Roberson , Shirley Assemblyman Tom Bates	Admin. Assist.
Roberts , Mimi Civic Arts Commission	Acting Chair (Former)
Ross , Andy Cody's Books	Owner
Sanders , Barbara South Berkeley NDC	Executive Director
Scott , Pat KPFA-FM	General Manager
Shattuck Leite , Jeffrey Berkeley Symphony	Chair
Taylor , Larry Youth Employment Services	Supervisor
Taylor , Malcolm Bay Cablevision	General Manager
Traylor , Anne City of Berkeley	Council Aide
Turitz , Eugene Civic Arts Commission	Chair
Vaughn , Nora Black Repertory Group, Inc.	Director
Walker , Anna Black Repertory Group, Inc.	Community Relations
White , Bill Berkeley Fire Department	Acting Fire Chief
Williams , Landon Office Economic Development	
Xavier , Eric City of Richmond	Cable TV Coordinator

* APPENDIX D - 11 *
* OTHER CONTACTS *

Allen, Edward
Cable Television Task Force

Bergen, Jane
League Women Voters, Berkeley

Bobino, Mario Producer
Berkeley Video Engineering

Bruce, T. Director
Media Center

Bume, Claire
Art & Education Media

Burdick, Richard Manager
Trinity Chamber Concerts

Cheema, Boona Executive Director
Berkeley-Oakland Support Serv.

Cotton, Phil
Berkeley Young Adult Project

Dean, Shirley Councilmember

Doyle, John H. Producer/Director
J.H. Doyle Productions

Ellish, S.

Fitz, Sonja
Berk/Oakland Support Services

Gordon, Howard

Hall, Yvonne
Cable Television Task Force

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APPENDIX D - 11
OTHER CONTACTS

Head, Ben
B.H.S. Video Club/Class

Henderson, David
KPFA-FM

Jelinck, Don Councilmember

Jelinek, Esbelle

Johnson, Paulette

Jones, Serena

Jory, John L. Director
Berkeley Inter-Faith Council

Kenyatta, Marysa
Educational Services Assoc.

Khurana, Barbara Planner/Coordinator
Independent Elders Network

Leonardos, George N.
Del-Calif St Neighborhood Asso

Mac, Linda

Mack, Kim
Educational Services Assoc.

Malango, T. Director
Media Center

Malenky, Alexi

Mare, Mary

APPENDIX D - 11
OTHER CONTACTS

Maynard, Hugh
C.A.S. Productions

Meyer, David
B.H.S. Video Club/Class

Michael, Pamela
KPFA

Minor, Drewelyn Adm. Asst.
J.H. Doyle Productions

Mitchel, Marilee
Del-Calif St Neighborhood Asso

Monroe, Cameron
B.H.S. Video Club/Class

Moore, Frank

Nemcik, Tom Executive Director
Community Memory

Newby, John Marketing Director
Bay Cablevision

Ooevedo, Martha
B.H.S. Video Club/Class

Pasle' Green, Jeane
KPFA Women's Department

Paz, Jose
B.H.S. Video Club/Class

Pitre, Patricia
COB/Young Adult Project

Richards-Maynar, Dee
C.A.S. Productions

Robinson, Marinanne Public Rel. Chair.
B.Fellowship Unitarians Univ.

APPENDIX D - 11
OTHER CONTACTS

Rojan, Media Center	Lowell	Producer
Sanford, Cable Television	Pamela Task Force	
Sawyer, B.Fellowship	Paul Uniterians Univ.	Minister
Scott, Educational Services	Bari Assoc.	KPFA Programer
Scruggs,	Rita T.	
Shafer, Berkeley USD	Margot	Film Librarian
Shirek,	Maude	Councilmember
Sibeko-Kouate, Educational Services	Makinya Assoc.	Sister
Sinsheimer, Cable Television	Jeffrey Task Force	
Skinner,	Nancy	Councilmember
Sophiea,	Dale	
Stancliff, Media Center	Richard C.	Director
Stone, KPFA Pacifica	Jennifer Public Radio	
Switzer, KPFA Pacifica	Maggie Public Radio	Programmer
Taylor, Bay Cablevision	Malcolm	General Manager

APPENDIX D - 11
OTHER CONTACTS

Traylor, Howard
Cable Television Task Force

Valverde, Desere
C.A.S. Productions

Wainwright, Mary Councilmember

Weekes, Fred Councilmember

Werner, Mark
Del-Calif St Neighborhood Asso

Whitehurst, Connie Principal
Longfellow Elementary School

Williams, Nikki
BNSP/BYA

Willis, Allen Director
Media Center

Willis, Ron Design Engineer
Berkeley Video Engineering

Wilson,

Yearwood, Dayna
C.A.S. Productions

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TO: Harriet
FROM: Kathleen
DATE: November 10, 1989
RE: FORMAT FOR INTERVIEWS

A little bit ago I promised to share an outline of the interview format I've been using for the education interviews. I hope the following makes any sense.

INTERVIEW FORMAT:

1. Introductions

- a. Relationship to City
- b. General scope of needs assessment
- c. Members of the Assessment Team
- d. Brief background on me, especially if I have any background in their area or potential "conflict."

2. Structure of Needs Assessment

- a. Basic "events"
- b. Where the interview fits in
- c. Scope of the franchise renewal
- d. Renewal issues which could affect interviewee

3. Background on Organization/Interviewee

- a. Background of interviewee, tenure in current position
- b. Description of the department, agency as a whole: organization, funding, budget level, services, constituency; try to get sense of changes, evolutions
- c. Organizations they work with, against.

4. Issues Facing the Organization (what is the organization paying attention to, crises, future changes, etc.)

5. Status of telecommunications now

- a. Level of Telecommunications planning, by whom
- b. Telephone system (if they know)
- c. Data systems
- d. Video: as users, suppliers
- e. Cable related activities

6. Cable Related Plans/Needs in Future

- a. As appropriate, review again the franchise renewal implications for the organization: universal build, channel capacity, access, fiber/coax, etc.
- b. Review plans, if any
- c. Review needs, seeding in options, ideas tying their earlier discussion of services, needs into cable applications.

8. Suggested interviews for study

9. Offer to send followup information, put them on mailing list for future information, etc..

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**PROGRAM SUGGESTIONS FOR PUBLIC ACCESS CHANNEL
TALLIED FROM INTERVIEWS
BERKELEY NEEDS ASSESSMENT**

My organization would like to use cable television to:

- 20 - Reach a wider audience with our services/programs.
- 19 - Inform the community about an issue or topic.
- 8 - Cover community cultural or social events.
- 6 - Provide entertainment.
- 15 - Promote our image in the community.
- 9 - Attract more members/customers/clients.
- 5 - Promote social change.
- 9 - Target programming towards specialized audiences.
- 16 - Train staff/volunteer/members.
- 15 - Produce and cablecast educational programming.
- 8 - Cablecast telecourses.
- 3 - See City Council and governmental meetings and hearings cablecast. (Close caption these meetings.)
- 2 - Produce and cablecast live call-in programs or forums.

Other (please specify):

- 4 - Cablecast job listings
- 3 - Produce programs on how to apply and interview for various jobs
- 5 - Teleconferencing
- 5 - Make all non-confidential City and/or community information accessible to Berkeley citizens
- 1 - Data cables to back up phone lines in case of outage.
- 1 - Ability to cut into cable broadcasts with emergency information. (Similar to the Emergency Broadcast System on radio.)
- 12 - Community Bulletin Board
 - 1 - Student Productions - for both education of the student and provide programming directed towards college audiences.
 - 3 - Contract training
 - 5 - Access to Curriculum material
 - 9 - In-house and/or inter institution communications
 - 1 - Down load instructional materials
- 15 - Calendar Channel (audio as well as video.)

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PROGRAM SUGGESTIONS FOR PUBLIC ACCESS CHANNEL - TALLIED FROM INT
Page 2

My organization would like to use cable television to:
Other (please specify):

- 1 - Channel that is more accesable for PSA's than commercial channels.**
- 1 - Receive cable for more diverse entertainment choices.**
- 1 - Menu Channel.**
- 1 - Increase the discount for the disabled and lower income subscribers.**

*** 6 (six) of those interviewed specifically mentioned the desire and need for an accessible and functioning, up to date video studio, equipment and/or training.**

September 4, 1990

Ms. Kathleen T. Schuler
Cable Consultant to the
City of Berkeley
3015 Turk Street
San Francisco, CA 94118-4157

Dear Kathy:

The attached proposal has evolved from discussions among student and community volunteers at the University of California's Berkeley campus radio station KALX (90.7 FM). These are veteran radio producers, a number with video production experience as well, who are deeply committed to alternative radio programming. They have consistently earned recognition through statewide and national radio programming awards competitions, and share a philosophy of programming by and for the community that provides an ideal base from which to develop the community oriented program formats described in this proposal.

I have several reasons for wholeheartedly supporting this proposal as the University's administrative supervisor for the radio station:

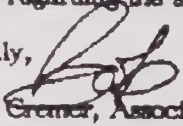
First, KALX programming under these volunteers' guidance has continued to define community oriented programming in the Bay Area. KALX's programming is unequalled in commercial or noncommercial radio for its insight into local issues and its innovation in introducing listeners to new musical forms. For example, KALX was the only station to produce an in-depth, 12-part series on AIDS in Bay Area ethnic communities, examining the cultural and societal factors that affect education and medical treatment. KALX has revived radio drama. In music, KALX has won several gold records for introducing audiences to major new trends in music, and showcasing the talents of local bands.

Second, this programming experience provides successful radio models for developing equally innovative television programming that will bring additional community programming to Berkeley residents.

Finally, experienced KALX student and community volunteers possess the knowledge and expertise to realize these programming ventures. While they will require support in the form of production and editing equipment, and studio facilities for production, they will have a base of operations for planning and coordinating production at KALX. We will be able to handle additional training that is required through campus facilities and personnel.

I would appreciate your sharing this proposal with appropriate individuals and groups involved in the franchise renewal process and will be happy to provide any additional information you might require regarding the attached proposal.

Cordially,


Robert Gremier, Associate Director
cc: Sandra Wasson, KALX General Manager
KALX Cable TV Committee Members

KALX (90.7 FM)

**A Proposal for the Production of
Public Affairs and Musical Programming**

for Broadcast on

**Community Access Cable Television
in the City of Berkeley**

Proposal Submitted by

**Sandra Wasson, General Manager
Robert Greiner, Administrative Supervisor
KALX Community Access Cable TV Committee**

August, 1980

Introduction

As a community, Berkeley is the epitome of diversity; diversity that spans ethnic, economic, and sociopolitical considerations. Yet Berkeley has not been able to harness the potential of community access cable television to serve its unique demographics with equally unique community produced programming. Neither PBS nor cable TV networks engaged in "narrowcasting" have responded to the need for truly local programming. Clearly, the mission has fallen to the PEG channels to meet this legitimate community need. PEG channels in other communities illustrate the responsiveness these channels bring to community needs. As a community broadcaster, KALX and its 250 volunteer staff support the development of just such a mechanism in the Berkeley community for meeting the informational and entertainment needs of Berkeley cable TV subscribers.

This proposal for the production of programming to serve Berkeley's diverse communities grows out of a similar commitment to alternative radio programming that has continued for more than two decades at KALX-FM, the campus radio station of the University of California at Berkeley. The station produces 19-1/2 hours of Public Affairs programming each week that focuses on issues of concern to the community: health, the environment, human rights, cultural diversity, and politics. "Earth Day" is every day at KALX. The station's music also responds to diversity in the community as well with a mix of reggae, ska, hip-hop, house music, blues, jazz, rock, Third World Beat, and experimental music. The News Department staff of 65 have also distinguished themselves with award-winning coverage of local news and community issues.

KALX's commitment to diversity and innovation is reflected in the specific program formats proposed below. KALX's ability to bring experienced personnel to the task of expanding on this programmatic base in the area of community access cable television programming will contribute to the vitality of community based programming in Berkeley.

Public Affairs Program: "The Community at Issue"

Length: 30 Minutes

Frequency: Monthly

This 30-minute program will examine significant community issues, relying on "feature news" videotape roll-ins videotaped on location in the community to be incorporated into studio interviews and panel discussions. A program host and the producer of each segment will anchor the program.

Representatives of community organizations, local and state agencies, and local government will act as expert witnesses for each issues covered in a given program.

The prerecorded videotape roll-ins provide on-location coverage of community events and background information about an issue that will enable viewers to assess the content of the studio discussions of issues that follow. In general, these prerecorded elements are designed to provide or more vivid informational context for the discussion of community issues. If resources are available, viewer call-ins might be used where appropriate to provide the highest level of communication possible with viewers in the community.

The topics covered in this magazine-format program will be dictated to a large extent—as news is—by events and community-based initiatives to respond to issues of concern to the community. The goal of this show is not to cover "breaking news," however, but to focus on longer-term issues of interest to the Berkeley community. General areas of coverage based on our past experience in radio news and public affairs production will include transportation, health, the environment, the homeless, emergency preparedness, the needs of disabled residents, to name a few.

The program will begin as a monthly "News Magazine," drawing on the more than 150 staff members of KALX's News, Public Affairs, Third World, and Women's Programming Departments. Pre-production for each show will be based at the offices and studios at KALX, 2311 Bowditch Street in Berkeley.

Production requirements that would be required to produce this program for community access cablecast would include a 2- or 3-camera studio configuration, VCR with time base corrector, audio mixing board for panel discussions, and a character generator. On-location videorecording would require a camcorder or two-piece portable field recording equipment with a simple light kit, and microphone package (lavaller mics and a shotgun).

Alternative Music: "The Berkeley Beat"

Length: 30 Minutes

Frequency: Monthly

This program is a unique source of music videos from Bay Area musicians as well as innovative artists from other parts of the country who are creating the music trends of the '90s. This program carries on in a video format KALX's 20-year commitment to providing audiences with music that reflects

emerging trends in music, experimental music, and genres that have been consistently ignored by mainstream stations, music publishers, and record labels. Not surprisingly, the types of music featured on this program will include such diverse genres as rap/hip-hop, ska, reggae, and Third World Beat, among others, that reflect the cultural diversity and many of the musical interests of the Berkeley community unavailable on current music programs, such as California Music Channel, MTV, VH-1, or Night Traks.

The format of the program would be prerecorded. A Music DJ from KALX, on a rotating basis depending on the thematic focus of each month's program, would introduce prerecorded music videos supplied by Bay Area/regional musical groups, provide background information on the type of music presented, and information or on-camera interviews with the alternative artists themselves. At the present time, KALX already receives numerous videos from such local musicians as well as some from groups in other parts of the country on a weekly basis. Videos to be considered for inclusion in this monthly program would be screened for lyrics and visuals to insure that materials meet with the cable system franchise regulations. In addition, the producer, Will Smith, a long-term community volunteer at KALX, would be responsible for obtaining all clearances for music and talent necessary for each music video.

As a recognized Bay Area resource for alternative music programming, KALX enjoys well established relationships with alternative artists and record labels specializing in the forms of music to be included in this monthly program. KALX's offices and studios at 2311 Bowditch Street in Berkeley would be the production base for the monthly cable program. This program promises to address the specific musical tastes and interests of the culturally diverse Berkeley community, while also exposing others in the community to the rich musical traditions emanating from these genres of music.

Cable System resources required for this program would be primarily a camcorder/two-piece portable recording system for videotaping the DJ (possibly at a KALX production console) and simply cuts-only editing system for cutting together DJ intros and the prerecorded music videos in the program with a character generator/switcher to add titles, credits, and lowline supers.

Black Music Showcase: "Billy's Jam"

Length: 30 Minutes

Frequency: Monthly

This half-hour monthly program is based on a successful radio version that runs on KALX every

week. It will focus specifically on Black music, notably rap, with an emphasis on local talent. This program would be a studio-based program, incorporating prerecorded videotape roll-ins from community locations and venues. Studio segments would include interviews with the artists and live performances as well as roll-ins of other performances/interviews that were videotaped at local clubs and "on the street" prior to broadcast. This program would be targeted primarily at the Black community in Berkeley which constitutes about 55% of Berkeley's population. In addition, it would acquaint others in the community with a form of music that is breaking new ground and is quickly becoming a major force in the world of alternative music. Finally, focusing on local talent and performances, this program will create a unique community context for the development of an emerging musical form on the streets and in the clubs that make Berkeley a vibrant and creative focal point of alternative music.

The pre-production of this program would be based at KALX's studios and offices at 2311 Bowditch Street in Berkeley. The host of this show, Billy Kiernan, is a regular DJ on KALX and also works as a DJ in commercial radio at KOFY-AM.

Production facilities and requirements for production of the program include a studio facility with 2- or 3-camera configuration, VCR with time base corrector for videotape roll-ins, character generator/switcher for studio segments and adding low-line supers to prerecorded segments from the field. A camcorder or two-piece portable videorecording system would be required for on-location production segments.

Drama: "Shoestring Video Theater"

Length: 30 Minutes

Frequency: Biannual

Radio drama has flourished at KALX in recent years through the efforts of a small production company founded by Emmy Award Winning producer Monica Sullivan. "Shoestring Radio Theater" has brought radio drama to the attention of a new generation of listeners with stories based on popular forms of the '40s, but with all the twists needed for radio in the '90s. This program has become a staple of Saturday evening broadcasts on KALX and it is anticipated that cable television audiences will find the video counterpart to this radio production equally fascinating and entertaining. Each production will be based on an original screenplay by a local writer and will be staffed entirely by local production personnel and actors. The involvement of the community will be extensive in all aspects of each production. Shoestring Radio Theater is currently in post-production on the first of its video programs, "The Celluloid Man," a horror story based on universal themes prevalent in horror films around the

world during the past 50 years. Unlike the proposed program, this entry was shot on film and will be transferred to video for broadcast as a part of the University of California at Berkeley's weekly cable television program "An Open Window," which airs in Berkeley as a part of Peralta College's Television's (PCTV) weekly community access program.

Conclusion

The more than 250 staff members at KALX-FM welcome the opportunity to adapt proven radio formats to the added dimensions that video can provide. They are committed to providing viewers in the Berkeley community with programming as diverse as the residents in our community and to provide content that is not duplicated elsewhere on the broadcast spectrum. As such, these program ideas represent attempts to bring these tested themes so successful in radio in a different format to viewers of public access cable TV in Berkeley. KALX Radio hopes that the City of Berkeley is able to develop a community base in cable television for exploiting the medium in the best and most productive sense as a forum for the intellectual and cultural vitality of a unique community.

Pre-production and project planning will take place with Shoestring Radio Theater staff and other interested parties at the KALX offices and studios at 2311 Bowditch Street in Berkeley. Rehearsals and other preparations, including sound effects and other audio preparations will take place at this site.

The shows will be shot "film style" for the most part, although a particular script might dictate a studio setting for the performance. Program production requirements will include a camcorder or two-piece portable videorecording system with lavalier and shotgun microphones, and a simple light kit. Editing these programs will require at the minimum a cuts-only system with Fade-to-Black capability and character generator for titles and credits. Video will need to be time-base corrected for editing and broadcast.

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As an independent video producer and former public access participant on the East coast, I strongly support the development of community television for the city of Berkeley, and most especially for KALX-FM.

As the radio station of the University of California, KALX has enjoyed wide student and community participation since 1967. Ours is an audience that reflects the ethnic and socio-political mix that is Berkeley, and my past experience with public access indicates that the application of grass-roots tv in our city can only enhance and broaden this composite.

Listeners at KALX look forward to hearing a wide range of musical genres and alternative programming, much of it not accessible on mainstream commercial radio. With the availability of studio and portable equipment, we can continue to bring exciting music into the homes of audience with music videos, interviews and possibly even live performances. Our public affairs shows related to the arts can utilize the medium to provide film, theatre and dance clips of upcoming performances as well as interviews with performers and directors; our environmental show can continue to document pressing environmental concerns on the local level, but with the added impact of the visual; most importantly, members of the KALX community can be trained on the technical and aesthetic levels of video production and hand-tailor the medium to fit the needs of our community. So many possibilities exist for connecting to our audience in exciting and stimulating ways. Let's hope that the concept of public access becomes a reality for Berkeley.

Sincerely,

Fred Finkelstein
Fred Finkelstein, music programmer and public
affairs producer, KALX-FM
Berkeley, 5/29/90

APPENDIX E

SAMPLE EQUIPMENT PACKAGES PEG ACCESS

PORTABLE EQUIPMENT

1	3	SUPER VHS CAMCORDERS	\$2,700.00	\$8,100.00
2	6	BATTERY PACKS	55.00	330.00
3	3	FLUID HEAD TRIPODS	280.00	840.00
4	3	LIGHTING KITS	825.00	2,475.00
5	6	QUARTZ LAMPS	40.00	240.00
6	3	AUDIO MIXERS	529.00	1,560.00
7	6	LAVALIER MICROPHONES	179.00	1,074.00
8	3	HAND HELD MICROPHONES	196.00	588.00
9	3	SHOTGUN MICROPHONE	449.00	1,347.00
10	3	HEADPHONES	75.00	225.00
11	3	PORTABLE COLOR MONITOR	465.00	1,395.00
12	3	AC ADAPTOR	62.00	186.00
13	3	UTILITY CASE	273.00	819.00
14	3	AC EXTENSION CABLE	40.00	120.00
	LOT	CABLES/CONNECTORS		250.00

SUB-TOTAL \$19,549.00

EDITING SYSTEMS (CUTS ONLY)

1	3	EDITING CONTROLLER	\$2,250.00	\$6,750.00
2	3	VHS EDITING VTR	6,540.00	19,620.00
3	3	S-VHS SOURCE VTR	11,985.00	13,985.00
4		*3/4" EDITING VTR APPROX. \$6000.00 PER SYSTEM		
5	6	13' COLOR MONITORS	650.00	3,900.00
6	1	CD PLAYER	400.00	400.00
7	3	AUDIO MIXER	845.00	2,535.00
8	3	AUDIO CASSETTE DECK	399.00	1,197.00
9	1	PRODUCTION TITLER W/ GENLOCK	3,000.00	3,000.00
	LOT	CABLES/CONNECTORS		450.00

SUB-TOTAL \$51,837.00

PORTABLE VIDEO OPERATION MODULE

1	2	3-COLOR CHIP CAMERA/STUDIO	\$12,055.00	\$24,110.00
2	2	CAMERA CABLES	195.00	390.00
3	1	SWITCHER/SPECIAL EFFECTS GEN	6,055.00	6,055.00
4	2	8" COLOR MONITOR	920.00	1,840.00
5	1	SUPER VHS VTR	6,500.00	6,500.00
6	1	PORT RACKMOUNT SHIPPING CASE (FOR SWITCHER)	800.00	800.00
7	1	PORT RACKMOUNT SHIPPING CASE (FOR VTR)	300.00	300.00
8	2	FLUID HEAD TRIPODS	930.00	1,860.00
9	1	AUDIO MIXER	520.00	520.00
10	3	LAVALIER MICROPHONES	325.00	975.00
11	1	HAND HELD MICROPHONES	196.00	196.00
12	1	HEADPHONES	75.00	75.00
13	LOT	RACKMOUNT ADAPTORS	350.00	350.00
14	LOT	CABLES CONNECTORS	400.00	400.00

SUB-TOTAL

\$44,371.00

STUDIO EQUIPMENT

1	2	CYCLORAMA	\$3,000.00	\$6,000.00
2	1	LIGHTING PACKAGE 20X25	22,300.00	22,300.00
3	1	CD 80 DIMMER PACK	4,000.00	4,000.00
4	1	CONTROL CONSOL	2,700.00	2,700.00
5	3	3-CHIP COLOR CAMERA	12,055.00	36,165.00
6	3	15:1 SERVO ZOOM LENS	1,900.00	5,700.00
7	3	REMOTE CONTROL (ZOOM)	1,360.00	4,080.00
8	3	A25 CAMERA CABLES	740.00	2,220.00
9	3	HD FLUID HEAD TRIPODS W/ DOLLY	2,300.00	6,900.00
10	2	SHOTGUN MICROPHONE	875.00	1,750.00
11	2	SHOCK MOUNT	135.00	270.00
12	2	BOOM STANDS	200.00	400.00
13	1	26' COLOR MONITOR	965.00	965.00
14	1	UNIPLEXOR FOR SLIDES	1,500.00	1,500.00
15	1	GRAPHICS STAND PHOTOS & ART	2,000.00	2,000.00
16	1	TELEPROMPTER	2,000.00	2,000.00
17	1	TELEPHONE CALL-IN SYSTEM	3,000.00	3,000.00
18	1	VIDEO PRODUCTION SWITCHER	10,495.00	10,495.00
		TO INCLUDE:		
		DIGITAL BORDERLINE GENERATOR	1,500.00	1,500.00
		PULSE REGENERATOR	1,000.00	1,000.00
		CHROMA-KEYER	850.00	850.00
		EXTENDER BOARD	350.00	350.00
		CROSSPOINT 6119	6,000.00	6,000.00
19	1	MASTER SYNC GENERATOR W/ TEST SIGNAL GENERATOR MODULE	3,450.00	3,450.00
20	1	VECTROSCOPE	2,250.00	2,250.00

21	1	WAVEFORM MONITOR	2,250.00	2,250.00
22	1	DUEL RACKMOUNT KIT	180.00	180.00
23	1	VIDEO DISTRIBUTION AMPLIFYER	2,075.00	2,075.00
24	1	AUDIO DISTRIBUTION AMPLIFYER	2,895.00	2,895.00
25	1	CHARACTER GENERATOR W/ GENLOCK	3,000.00	3,000.00
26	2	20" COLOR PREVIEW MONITORS	1,600.00	1,600.00
27	2	DUEL 8" SOURCE MONITORS	845.00	845.00
28	1	MULTI FORMAT FRAME SYNCHRONIZER	6,250.00	6,250.00
29	1	COMPLETE INTERCOM SYSTEM	3,500.00	3,500.00
30	2	SPEAKERS	237.00	237.00
31	1	POWER AMPLIFYER	529.00	529.00
32	1	AUDIO MIXING CONSOL	4,625.00	4,625.00
33	1	3/4" MASTER RECORD VTR	8,850.00	8,850.00
34	1	S-VHS MASTER RECORD VTR	6,500.00	6,500.00
35	1	S-VHS RECORDER	3,995.00	3,995.00
36	1	NOVA TBC	5,000.00	5,000.00
37	1	S-VHS PLAYER FOR ROLL-INS	1,600.00	1,600.00
38	1	3/4" PLAYER FOR ROLL-INS	2,950.00	2,950.00
39	1	CUSTOM CONSOL/EQUIP RACKS	6,000.00	6,000.00
	LOT	CABLES /CONNECTORS	1,500.00	1,500.00
			SUBTOTAL	192,226.00

MASTER CONTROL				
1	1	VIDEO/AUDIO SWITCHER W/ TWX-AFV REMOTE PANEL	\$1,985.00	\$1,985.00
2	1	MASTER CLOCK	1,987.00	1,987.00
3	1	CHARACTER GENERATOR W/ GENLOCK	3,000.00	3,000.00
4	2	3/4" PLAYER	2,950.00	5,900.00
5	1	S-VHS PLAYER	2,380.00	2,380.00
6	1	AUDIO ROUTING SWITCHER W/	5,225.00	5,225.00
7	2	14" COLOR PROGRAM MONITORS XY PANEL	1,095.00	2,190.00
8	1	20" TV RECEIVER	549.00	549.00
9	1	TV TUNER/DECODER	379.00	379.00
10	2	SPEAKERS	237.00	474.00
11	1	POWER AMPLIFIER	529.00	529.00
12	1	MULTI-FORMAT FRAME SYNCHRONIZER	6,250.00	6,250.00
13	1	CUSTOM CONSOL/EQUIP RACKS	3,500.00	3,500.00
14	1	SLAVE SYNC GENERATOR	2,500.00	2,500.00
15	1	CONSUMER GRADE DUPL. SYSTEM	7,000.00	7,000.00
	LOT	CABLES/CONNECTORS	750.00	750.00
			SUB-TOTAL	\$44,598.00

PROPOSAL SUMMARY

PORTABLE EQUIPMENT	\$19,549.00
EDITING SYSTEMS (CUTS ONLY)	51,837.00
PORTABLE VIDEO OPERATION MODULE	44,371.00
STUDIO EQUIPMENT	192,226.00
MASTER CONTROL	44,598.00

SUB-TOTAL	\$352,581.00
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LABOR FOR DESIGN AND INSTALLATION ADDITIONAL	\$16,776.00
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Q

CABLE TELEVISION STATISTICAL REPORT

JUNE 1990 QUARTER

City of Los Angeles

Department of Telecommunications

Page 1

CABLE FRANCHISE AREA		A	B	C	D	E	F	G	H	I
CABLE TV COMPANY		CABLEVISION	KING	UNITED	KING	FALCON	CENTURY	CENTURY	CENTURY	CONTINENTAL
FRANCHISE EFFECTIVE DATE		08/29/87	08/07/87	02/06/86	08/07/87	10/13/86	08/07/87	08/07/87	08/07/87	08/07/87
FRANCHISE ORDINANCE NUMBER		162,407	162,535	160,408	162,536	149,029	162,578	162,579	162,580	162,540
AMENDING ORDINANCE NUMBER		165,782	163,463		163,464	161,643	163,465	163,468	163,467	163,468
DWELLING UNITS	(DU AREA)	183,417	11,517	199,000	29,107	98	66,166	59,882	128,956	310,351
DWELLING UNITS PASSED	(DU PASSED)	183,417	11,517	199,000	29,107	98	65,808	58,780	127,548	310,351
AVAILABILITY	PASSED/AREA	100%	100%	100%	100.00%	100.00%	99.46%	94.84%	98.91%	100.00%
BASIC SUBSCRIBERS	CURRENT QTR	82,206	8,294	71,206	20,076	90	37,237	35,094	39,241	109,449
	PREVIOUS QTR	81,996	8,215	70,256	19,842	90	36,726	34,787	38,065	102,180
	GAIN, (LOSS)	210	79	950	234	0	511	307	1,176	7,269
PENETRATION (%): (BASIC SUBS/DU PASSED)	CURRENT QTR	44.8%	72.0%	35.8%	69.0%	91.8%	56.6%	61.8%	30.8%	35.3%
	PREVIOUS QTR	44.7%	71.3%	35.3%	68.2%	91.8%	55.8%	61.3%	29.8%	32.9%
	GAIN, (LOSS)	0.1%	0.7%	0.5%	0.8%	0.0%	0.8%	0.5%	0.9%	2.3%
PREMIUM SERVICE UNITS	CURRENT QTR	91,699	6,161	92,440	13,633	58	27,847	36,425	22,727	144,695
	PREVIOUS QTR	97,049	6,014	89,163	13,689	59	27,288	36,813	22,695	140,352
	GAIN, (LOSS)	(5,350)	147	3,277	(56)	-1	559	(388)	32	4,343
PREMIUM PENETRATION: (PREM. SERV./BASIC SUBS)	CURRENT QTR	111.8%	74.2%	129.8%	67.9%	64.4%	74.8%	103.8%	57.9%	132.2%
	PREVIOUS QTR	118.4%	73.2%	126.9%	69.0%	65.6%	74.3%	105.8%	59.6%	137.4%
	GAIN, (LOSS)	-6.5%	1.1%	2.9%	-1.1%	-1.1%	0.5%	-2.0%	-1.7%	-5.2%
CABLE PLANT MILES	PLANNED	1,400	95	877	230	1	277	582	550	721
	ACTIVATED	1,400	95	877	230	1	277	582	550	721
	PERCENT	100%	100%	100%	100%	100%	100%	100%	100%	100%
CHANNEL CAPACITY Required/Available		60	60 / 34	77	60 / 29	54	54 / 38	54 / 38	54 / 40	54 / 54
CHANNELS PROGRAMMED		54	60	67	60	42	38	38	40	52
LIFELINE/BASIC SERVICE CHANNELS			17	30	17	20				20
BASIC/PLUS CHANNELS		50	52	55	52	35	32	32	33	44
ENHANCED SERVICES (added charges)		11	8	10	8	7	6	6	6	10
BASIC INSTALLATION RATE		\$50.00	\$40.00	\$30.00	\$40.00	\$35.00	\$27.50	\$27.50	\$20.00	\$34.65
LIFELINE MONTHLY RATE, WITH CONVERTER			\$14.40	\$3.95	\$14.40	\$17.50				\$2.10
BASIC MONTHLY RATE, WITH CONVERTER		\$20.95	\$16.25	\$15.45	\$16.25	\$22.50	\$21.14	\$21.14	\$21.14	\$17.80
PREMIUM MONTHLY RATE, ONE PAY CHANNEL		\$10.95	\$10.00	\$10.95	\$10.00	\$10.00	\$14.23	\$14.23	\$14.23	\$10.50
COMPLAINTS RECEIVED BY DOTC	CURRENT QTR	87	11	143	4	1	77	68	106	570
	PREVIOUS QTR	170	7	228	13	2	200	259	329	420
	GAIN, (LOSS)	(83)	4	(85)	(9)	(1)	(123)	(191)	(223)	150
COMPLAINTS PER 10,000 SUBS PER QUARTER		10.6	13.3	20.1	2.0	111.1	20.7	19.4	27.0	52.1

CABLE TELEVISION STATISTICAL REPORT

JUNE 1990 QUARTER

City of Los Angeles

Department of Telecommunications

Page 2

		J	K	L	M	N	CITY TOTALS	REMARKS
CABLE FRANCHISE AREA		CONTINENTAL	CONTINENTAL	BUENAVISION	COLONY	TIMES-MIRROR		
CABLE TV COMPANY		08/07/87	06/08/87	09/19/87	08/07/87	08/07/87		
FRANCHISE EFFECTIVE DATE		162,541	162,347	162,739	162,534	162,577		
FRANCHISE ORDINANCE NUMBER		163,469		163,470	163,471	165,177		
AMENDING ORDINANCE NUMBER		21,277	180,000	21,800	36,300	17,735	1,265,608	
DWELLING UNITS	(DU AREA)	21,223	138,773	21,800	35,788	17,735	1,218,951	
DWELLING UNITS PASSED	(DU PASSED)	100%	77%	100%	99%	100%	96%	
AVAILABILITY	PASSED/AREA	11,708	40,461	1,670	13,048	7,876	477,658	
BASIC SUBSCRIBERS	CURRENT QTR	11,429	34,952	1,722	12,539	7,779	480,578	
	PREVIOUS QTR	279	5,509	(52)	509	97	17,078	
	GAIN, (LOSS)	55.2%	29.2%	7.7%	36.5%	44.4%	39%	Penetration of all City dwelling units:
PENETRATION (%):	CURRENT QTR	53.9%	25.2%	7.9%	35.0%	43.9%	38%	37.7%
(BASIC SUBS/DU PASSED)	PREVIOUS QTR	1.3%	4.0%	-0.2%	1.4%	0.5%	1.4%	
	GAIN, (LOSS)	14,421	80,038	2,164	16,806	8,136	557,250	
PREMIUM SERVICE UNITS	CURRENT QTR	14,361	68,956	2,142	16,107	7,840	542,628	
	PREVIOUS QTR	60	11,082	22	699	198	14,622	
	GAIN, (LOSS)	123.2%	197.8%	129.6%	128.8%	103.3%	116.7%	
PREMIUM PENETRATION:	CURRENT QTR	125.7%	197.3%	124.4%	128.5%	102.1%	117.8%	
(PREM. SERV./BASIC SUBS)	PREVIOUS QTR	-2.5%	0.5%	5.2%	0.3%	1.2%	-1.2%	
	GAIN, (LOSS)	98	800	69	350	64	6,114	
CABLE PLANT MILES	PLANNED	98	691	69	350	64	6,005	
	ACTIVATED	100%	86%	100%	100%	100%	98%	
	PERCENT	54 / 54	60 / 60	60 / 60	60 / 60	54 / 54		@ = 2 DUPLICATED
CHANNEL CAPACITY Required/Available	52	52	@ 38	59	50	47		AVG. PROGRAMMED CHANNELS
CHANNELS PROGRAMMED	20	23	24	26	34	23		AVG. LIFELINE CHANNELS
LIFELINE/BASIC SERVICE CHANNELS	42	42	32	51	41	42		AVG. BASIC CHANNELS
BASIC PLUS CHANNELS	10	11	5	8	5	8		AVG. ENHANCED SERVICES
ENHANCED SERVICES (added charges)	\$21.47	\$24.95	\$39.95	\$40.00	\$40.00	\$33.64		AVG. INSTALL RATE
BASIC INSTALLATION RATE	\$210	\$210	\$5.95	\$18.50	\$18.45	\$324		AVG. LIFELINE MO. RATE
LIFELINE MONTHLY RATE, WITH CONVERTER	\$18.90	\$16.75	\$18.90	\$19.50	\$17.95	\$18.97		AVG. BASIC MO. RATE WITH CONVERTER
BASIC MONTHLY RATE, WITH CONVERTER	\$10.50	\$10.50	\$6.00	\$9.95	\$10.95	\$10.93		AVG. RATE, ONE PAY CHANNEL
PREMIUM MONTHLY RATE, ONE PAY CHANNEL	13	115	0	11	7	1,213		TOTAL COMPLAINTS CURRENT QUARTER
COMPLAINTS RECEIVED	34	186	8	24	8	1,886		TOTAL COMPLAINTS PREVIOUS QUARTER
BY DOTC	(21)	(71)	(8)	(13)	1	(673)		TOTAL COMPLAINT - GAIN, (LOSS)
	11.1	28.4	0.0	8.4	8.9	25.4		AVG. COMPLAINTS/10000 SUBSCRIBERS
COMPLAINTS PER 10,000 SUBS PER QUARTER								

SCHEDULE OF RATES FOR BASIC CABLE TELEVISION SERVICE

CITY OF LOS ANGELES
DEPARTMENT OF TELECOMMUNICATIONS

June 1990

AREA	COMPANY	BASIC RATE	STANDARD CONVERTER	BASIC WITH CONVERTER	REMOTE CONTROL	CABLE GUIDE	CONVERTER REMOTE & GUIDE	NUMBER OF BASIC CHANNELS	COST PER CHANNEL		
									FOR BASIC	BASIC W/ CONVERTER	CONVERTER, REM. & GUIDE
A	CABLEVISION	\$20.95	Incl **	\$20.95	\$5.10	Incl *	\$26.05	50	\$0.42	\$0.42	\$0.52
B	KING B	\$16.25	Incl **	\$16.25	\$3.25	\$2.50	\$22.00	26	\$0.63	\$0.63	\$0.85
C	UNITED	\$15.45	N.A.	\$15.45	\$2.95	\$1.50	\$19.90	55	\$0.28	\$0.28	\$0.36
D	KING D	\$16.25	Incl **	\$16.25	\$3.95	\$2.50	\$22.70	26	\$0.63	\$0.63	\$0.87
E	FALCON	\$22.50	N.A.	\$22.50	\$2.45	Incl*	\$24.95	20/35	\$1.13	\$1.13	\$0.71
F	CENTURY F	\$18.25	\$2.89	\$21.14	\$7.49	Incl*	\$28.63	32	\$0.57	\$0.66	\$0.89
G	CENTURY G	\$18.25	\$2.89	\$21.14	\$7.49	Incl*	\$28.63	32	\$0.57	\$0.66	\$0.89
H	CENTURY H	\$18.25	\$2.89	\$21.14	\$7.49	Incl*	\$28.63	33	\$0.55	\$0.64	\$0.87
I	CONTINENTAL I	\$17.80	N.A.	\$17.80	\$2.10	\$2.10	\$22.00	44	\$0.40	\$0.40	\$0.50
J	CONTINENTAL J	\$17.80	\$2.10	\$19.90	\$2.10	Incl *	\$22.00	42	\$0.42	\$0.47	\$0.52
K	CONTINENTAL K	\$16.75	N.A.	\$16.75	Incl *	\$2.10	\$18.85	42	\$0.40	\$0.40	\$0.45
L	BUENAVISION	\$15.90	\$3.00	\$18.90	\$3.00	Incl *	\$21.90	32	\$0.50	\$0.59	\$0.68
M	COPLEY/COLONY	\$19.50	N.A.	\$19.50	Incl *	\$1.50	\$21.00	51	\$0.38	\$0.38	\$0.41
N	TIMES MIRROR	\$17.95	S.C./N.A.	\$17.95	\$2.00	Incl *	\$19.95	41	\$0.44	\$0.44	\$0.49
	AVERAGES	\$17.99	\$1.97	\$18.97	\$4.02	\$1.00	\$23.37	37/38	\$0.52	\$0.55	\$0.64

N.A. - BASIC SERVICE NOT AVAILABLE WITHOUT CONVERTER.

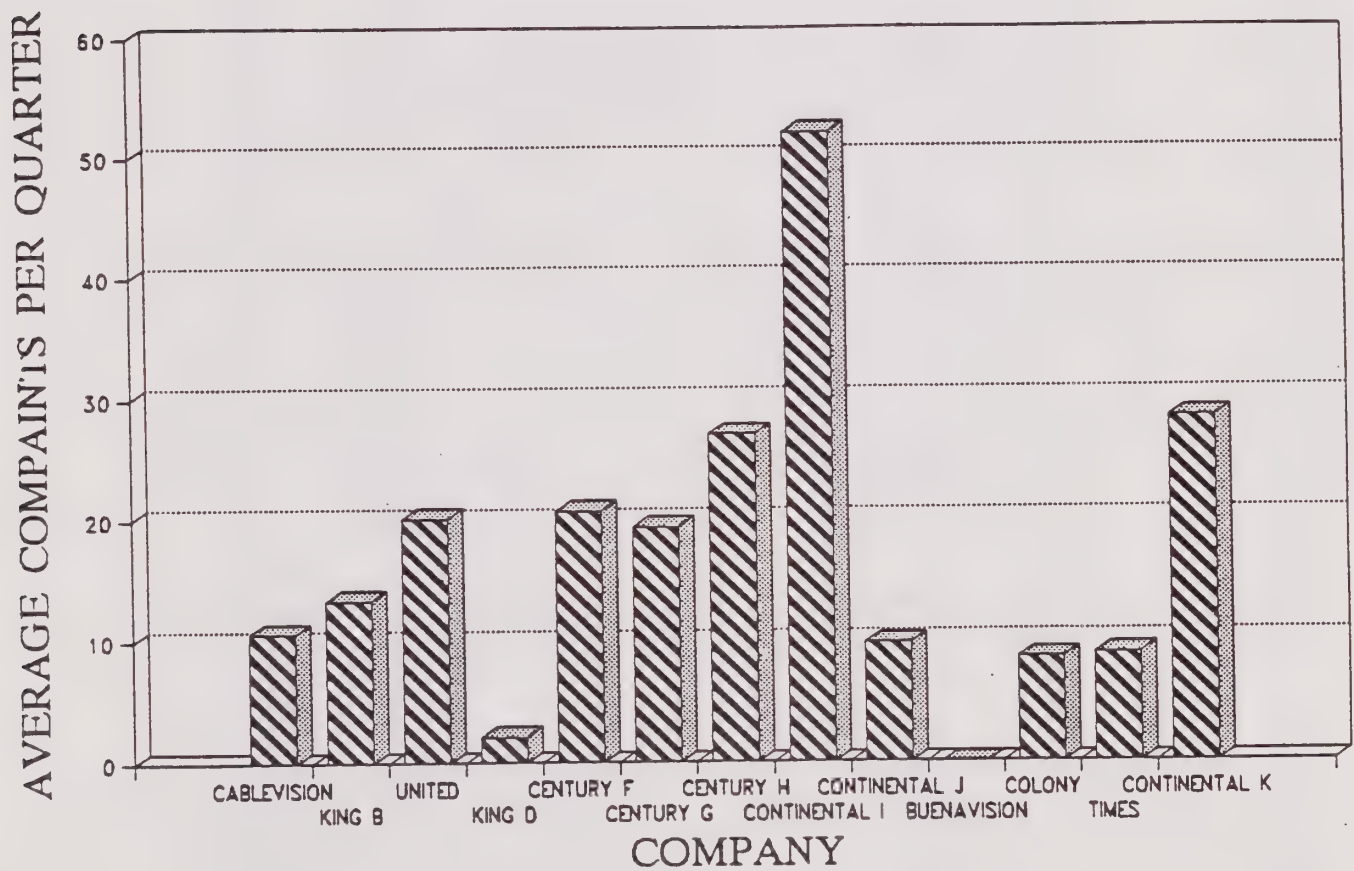
Incl * - REMOTE AND, OR GUIDE INCLUDED WITH *BASIC SERVICE*.

Incl ** - CONVERTER INCLUDED AS PART OF CHARGES FOR *BASIC RATE* WHETHER OR NOT THE SUBSCRIBER ACTUALLY HAS A CONVERTER INSTALLED.

35*** - FALCON ONLY OFFERS 35 CHANNELS AS A PACKAGE WITH A CONVERTER, REMOTE AND CABLE GUIDE

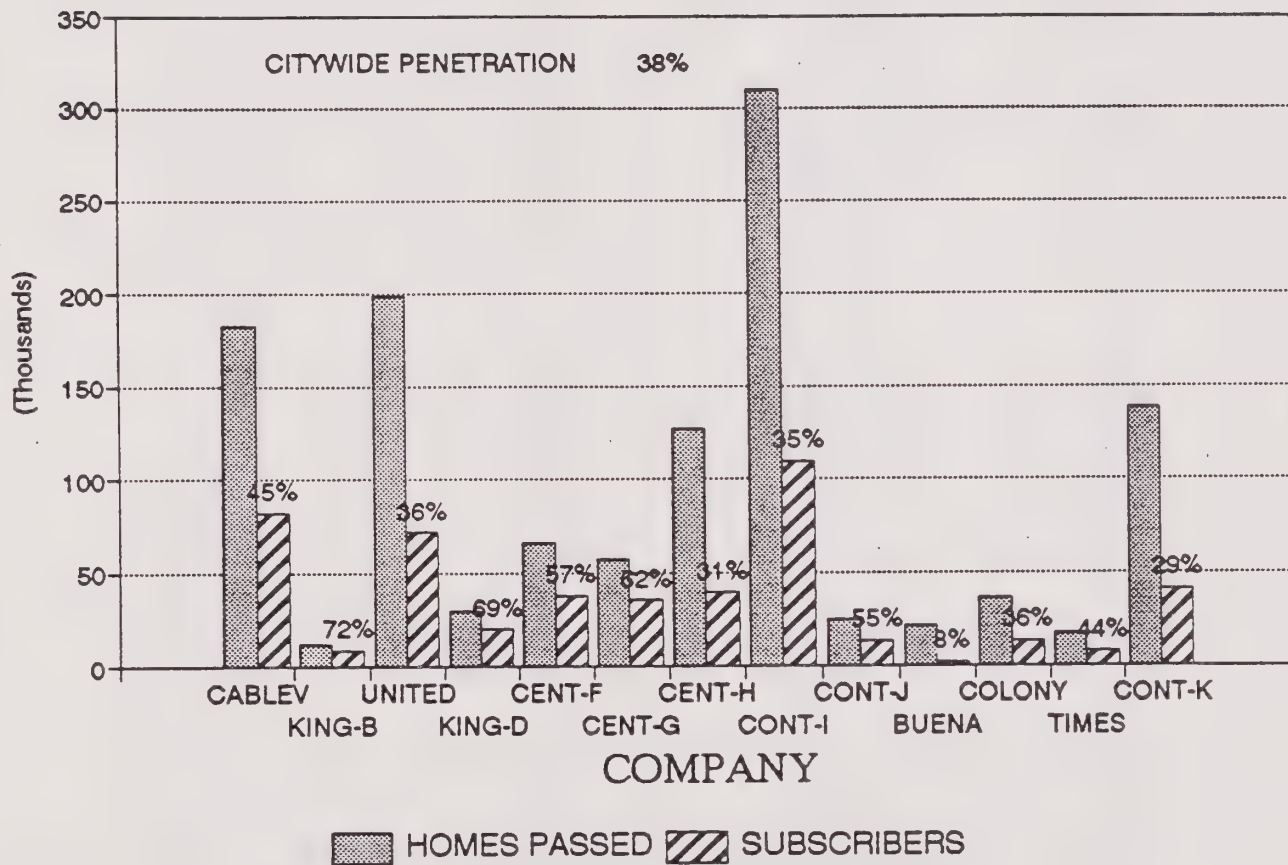
COMPLAINT COMPARISON - SECOND QUARTER

COMPLAINTS/10,000 SUBSCRIBERS/QUARTER



CABLE TV PENETRATION

CITY OF LOS ANGELES - JUNE 1990



TOTAL COMPLAINTS AND INQUIRES BY MONTH

1990

City of Los Angeles

Department of Telecommunications

CABLE COMPANY	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
Cablevision	44	60	66	29	26	32							257
King B	2	3	2	2	5	4							18
United	88	56	84	63	48	32							371
King D	6	0	7	2	1	1							17
Falcon	2	0	0	0	1	0							3
Century F	48	104	48	25	33	19							277
Century G	84	98	77	34	16	18							327
Century H	50	208	71	22	61	23							435
Continental I	82	75	263	270	195	105							990
Continental J	12	6	16	3	3	7							47
Continental K	43	46	97	26	52	37							301
Buenvision	3	3	2	0	0	0							8
Copley/Colony	4	15	5	6	3	2							35
Times Mirror	0	4	2	1	6	0							13
TOTAL	468	678	740	483	450	280							3099

COMPLAINT COMPARISON RATIOS*

1990

City of Los Angeles
Department of Telecommunications

CABLE COMPANY	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	AVERAGE PER MONT
Cablevision	5.4	7.3	8.0	3.5	3.2	3.9							5.2
King B	2.4	3.7	2.4	2.4	6.0	4.8							3.6
United	12.5	8.0	12.0	8.8	6.7	4.5							8.8
King D	3.0	0.0	3.5	1.0	0.5	0.5							1.4
Falcon	222.2	0.0	0.0	0.0	111.1	0.0							55.6
Century F	13.1	28.3	13.1	6.7	8.9	5.1							12.5
Century G	24.1	28.2	22.1	9.7	4.6	5.1							15.6
Century H	13.1	54.6	18.7	5.6	15.5	5.9							18.9
Continental I	8.0	7.3	25.7	24.7	17.8	9.6							15.5
Continental J	10.5	5.2	14.0	2.2	2.2	5.2							6.6
Continental K	12.3	13.2	27.8	6.4	12.9	9.1							13.6
BuenaVision	17.4	17.4	11.6	0.0	0.0	0.0							7.7
Copley/Colony	3.2	12.0	4.0	4.6	2.3	1.5							4.6
Times M	0.0	5.1	2.6	1.3	7.6	0.0							2.8
Average for All Companies	10.2	14.7	16.1	10.1	9.4	5.8							11.0



**CITY OF BEVERLY HILLS
OFFICE OF CABLE TELEVISION
INTEROFFICE COMMUNICATION**

March 11, 1991

TO: Fred Cunningham, Executive Director, Public
Affairs and Information

FROM:  John Risk, CATV Consultant

SUBJECT: Annual Cable Television Service Call, Telephone Response Time
and Complaint Log Analysis

The following is a summary and review of all customer service calls conducted by Century Cable in 1990. The information for this analysis was gathered from the quarterly service call compliance reports compiled by the Office of Cable Television. These quarterly reports are conducted by the office in accordance with Section 5.5.3 of the cable television franchise agreement and Section 6-2.24 of the Beverly Hills Municipal Code. Under these requirements, Century Cable is to respond to and, if possible, resolve all service problems registered by subscribers of the cable system not more than 24 hours following the receipt of complaint.

BACKGROUND

As required, the Office of Cable Television inspects Century Cable's service logs on a quarterly basis to verify the company's compliance with the franchise requirements. To analyze Century's compliance, the Office of Cable Television reviews all service calls recorded by the company. Service call data is submitted to the City through monthly record sheets provided by the company.

The reports submitted to the City itemize each service call made by Century in chronological order. The service calls on these lists include only those situations where a current subscriber contacts the company upon the disruption of their service. Century dispatches a service technician to the subscriber's residence in all but a few situations.

Service truck usage for general maintenance, rebuild construction, TOCOM converter placement, installations/disconnects, and outage responses

is not recorded in the service call sheets submitted to the City. Such information is covered by general franchise language ensuring responsive and adequate service by the company. The Office of Cable Television reviews such services as needed.

The Office of Cable Television categorizes all service call records into compliance and non-compliance categories. Most of the service calls which meet compliance are made within the 24 hour time block specified in the franchise agreement. The Office of Cable Television's quarterly reports document such calls as being resolved on the "Same" or "Next Day" according to their completion date.

Other service calls which also meet the City's compliance standards include those calls which are waived from the 24-hour response requirement. Such service calls include calls where the subscriber requests a specific date for their particular service to be made outside of the 24-hour response period. Such calls are categorized under the category of "Subscriber Requested Date". On average, 20% of all service calls are exempt from the 24-hour requirement due to the subscriber's preference for an alternative date. It should be noted, however, that some of the "Subscriber Requested Date" service calls are still handled within 24 hours.

Other categories of service calls which are exempt from the 24-hour response period include those service calls which are cancelled, where the subscriber is not at home, or where the service technician is denied access to a residence. In addition, the Office of Cable Television has granted Century a waiver in making service calls on Sundays and major holidays. Such calls are tabulated for the following day.

ANALYSIS

A total of 9,332 service calls were registered by Century Cable over the twelve months of 1990. The largest number of service calls were handled during the month of January, with the months of March and June falling second and third. As can be noted in Chart 1, while there were variations in the month-by-month statistics of service calls recorded, an overall decline in calls was realized by Century over the year. This fact is exemplified by a quarterly analysis of the total calls handled shown in Chart 2. Chart 2 also breaks down each quarterly total into its respective service categories.

Total Service Calls 1991

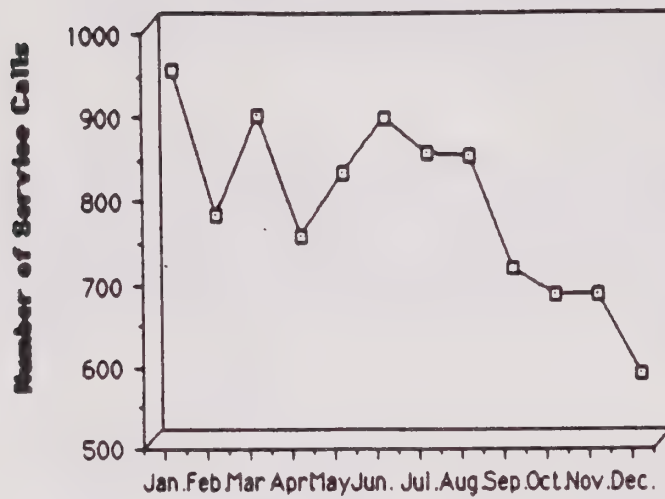


CHART 1

Annual Service Calls Response Categories for 1990

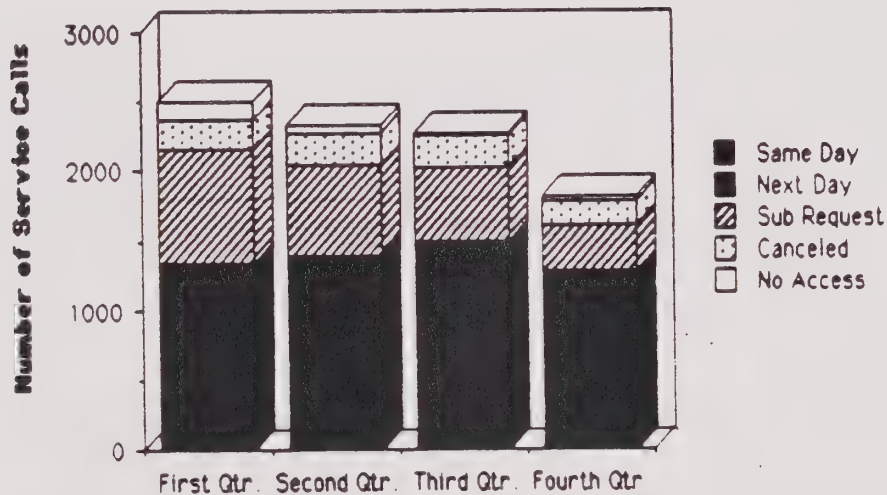


CHART 2

Although Century's significant drop in service calls over the year (from a high of 945 in January to 581 by December) is not a variable specifically related to the service response provisions of the Franchise Agreement, it is an important factor to assess the overall service performance of the cable company. The drop in overall service calls indicates that the technical performance of Century's existing plant is

incurring less problems for subscribers. Mike Quintana, Century's Plant Manager for the Beverly Hills service area has expressed that these statistics are the result of the completion and refinement of the system rebuild and conclusion of the TOCOM converter box distribution.

It is anticipated by the Office of Cable Television that the overall number of service calls made in 1991 will stabilize at the level of calls registered during the final months of 1990. The maintaining of service calls at such levels will be related to the amount of general system maintenance utilized by the company.

As noted in the quarterly service call reports previously submitted by the Office of Cable Television, Century Cable was able to meet the substantial compliance criteria for compliance with the provisions of the franchise agreement. As noted in Chart 3, each month of the year fell within the substantial criteria of compliance.

Service Call Percentage Compliance 1990

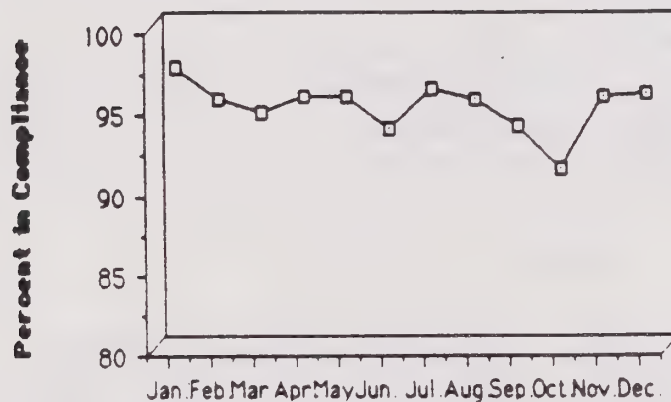


CHART 3

The yearly average for substantial compliance by Century Cable over the 12-month period was 94.9%. This percentage includes those calls exempt from the 24-hour response time frame noted previously.

A comparison of the total number of service calls made (as noted in Chart 1) to the percentage of service calls meeting the substantial compliance criteria of the City (Chart 3) reveals no correlation. Thus, the fact that the number of service calls made by Century decreased over each quarter did not result in a higher percentage of calls handled within the 24-hour service

response period. Century's plant manager has stated that staffing levels will be maintained at a level which will continue to fulfill the requirements of the City.

Chart 4 illustrates the individual compliance categories for all service calls made during the year. Note that the categories of "Next Day" and "Subscriber Requested Date" remain consistent as the most prominent type of service call response.

Service Call Response By Category

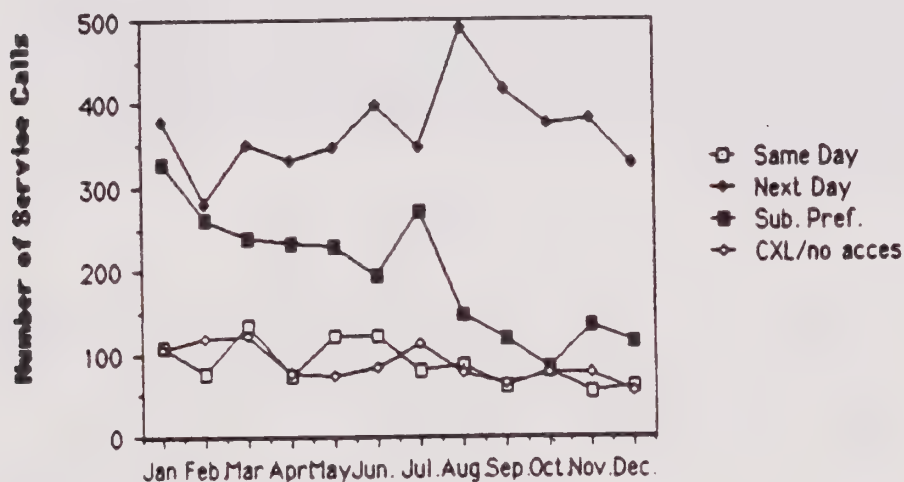


CHART 4

The subscriber preference category noticeably declined over the year with the exception of the month of July. Such a decrease can be attributed to variations in the reporting practices of the technical service personnel. Century has indicated that they are placing an emphasis on the standardized reporting by all technicians.

The following chart outlines the same data as in Chart 4, but maps each category in terms of its percentage to the total calls made during that month. Although the lines of the chart appear very similar to those in Chart 4, it reveals a small increase in the percentage of calls handled in the "Next Day" category.

Service Call Percentage Analysis

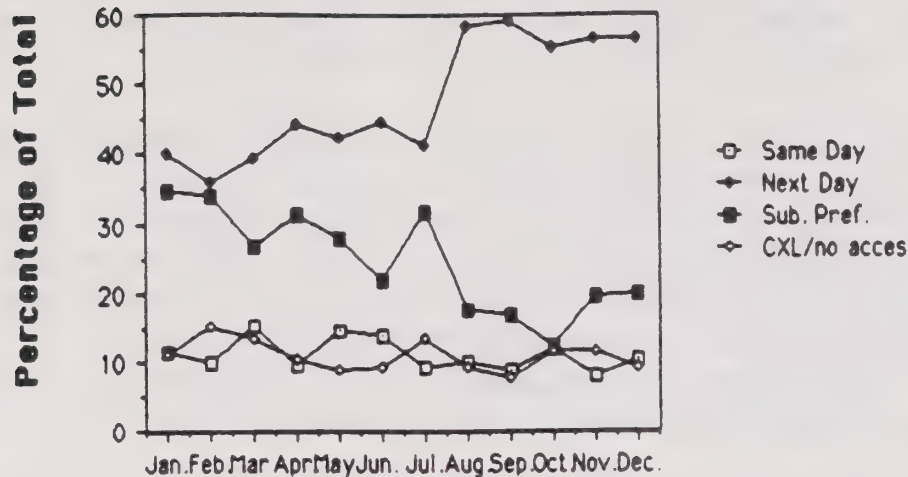


CHART 5

The evident decline in the number of total service calls made accompanied by an increase in the percentage of calls distributed, reveals a positive achievement in Century Cable's work in this area. Conversely, Chart 5 also indicates that Century's response to "Same Day" calls has shrunk slightly over this period. It was recommended to Century that they try to emphasize more "Same Day" service calls when possible. Century is in agreement with this recommendation.

CONCLUSION

Through the analysis of all trouble service calls made by Century Cable over the 1990 calendar year, the Office of Cable Television has found the cable company to have met the substantial compliance criteria required under Section 5.5.3 of the cable television franchise agreement and Section 6-2.24 of the Beverly Hills Municipal Code. The Office of Cable Television has found the statistical trends of the company in maintaining compliance to be positive and will continue to verify Century's compliance in this area as required.

ANNUAL TELEPHONE RESPONSE AND COMPLAINT SUMMARY

As a supplement to this report on service call compliance, a compilation of all cable television telephone response and complaint hotline statistics for the 1990 calendar year has been provided.

As can be noted by the attached "Cable TV Telephone Response Time" chart, data has been compiled in accordance with Section 5.5.2 of the cable television franchise agreement, whereby Century Cable is required to answer all incoming customer phone calls within a two-minute period.

On average, the City calls Century five times per day Monday through Friday to monitor the company's response time. As can be noted by the chart, Century obtained substantial compliance in meeting the two-minute response time maximum required by the City on most of the days checked. The days where Century fails to answer the phone within the two-minute period are listed in the third horizontal column entitled "Days Out Of Compliance." Overall, Century's compliance ratio was 93% for the year, with the majority of calls being answered in less than just one minute.

Please note that the National Cable Television Association's (NCTA) own industry standards are less than 30 seconds, and that this standard may soon be incorporated into new pending Federal Communications Commission (FCC) guidelines.

Also, attached is the "Cable TV Hotline Activity" chart which has been compiled to log and categorize all complaints that have been called in or written to the City. The numbers under the heading "Calls/Letters," are the actual amount of calls and letters received. The numbers under the "Comments From The Public" heading enumerate the types of complaints received. In some cases, a complainant may register more than one complaint.

Please note that the number of calls under "Calls to Century" also incorporate response time calls and that the "Correspondence" category also incorporates fax and Email correspondence.

John Risk

Attachments



CABLE TV HOTLINE ACTIVITY
1990

MONTH OF:	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
CALLS/LETTERS:	86	38	29	36	46	86	31	56	50	71	42	41

COMMENTS FROM THE PUBLIC:												
1. General information	5	3	5	15	20	7	12	19	17	32	20	21
2. Programming	-	-	-	-	3	17	2	3	-	2	-	1
3. Sales & Marketing	-	2	1	-	4	35	1	1	10	12	5	4
4. Service	84	39	19	11	22	55	11	50	33	22	14	9
5. Billing	5	2	2	7	2	2	5	6	3	5	1	8
6. Rates	6	3	6	-	2	3	5	-	9	15	11	2
7. TOCOM Conversion	9	7	12	4	6	6	2	3	3	1	1	-
TOTAL COMMENTS:	109	56	45	37	59	125	38	82	75	89	52	45
=====												
CALLS FROM CENTURY	20	28	12	16	18	18	9	17	8	7	5	5
CALLS TO CENTURY	119	137	104	105	136	129	95	120	101	129	84	84
CALLS TO PUBLIC	9	20	8	6	7	31	2	22	11	9	3	3
OUTGOING OTHER	5	5	1	-	-	-	-	-	-	-	-	-
INCOMING OTHER	2	3	12	-	-	-	-	-	-	-	-	-
CORRESPONDENCE	29	11	11	11	6	15	5	4	5	4	4	4



CABLE TV TELEPHONE RESPONSE TIME
1990

MONTH OF:	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
TOTAL ATTEMPTS:	93	115	91	96	117	90	87	102	90	114	75	86
% ANSWERED WITHIN TWO MINUTES:	86%	97%	99%	97%	85%	93%	91%	95%	96%	91%	97%	98%
DAYS OUT OF COMPLIANCE	5	3	1	3	8	5	4	5	3	4	2	1
=====												
MINUTES BEFORE ANSWER:												
<u>COMPLIANCE</u>												
Outage/Recorded Message	0	0	0	0	0	0	0	0	0	0	0	0
Less than 1	73	104	81	85	84	72	68	85	81	97	71	83
1 to 2	8	8	9	8	14	11	11	12	6	10	2	2
<u>NON-COMPLIANCE</u>												
2 to 3	4	2	0	2	5	2	4	2	2	0	1	0
3 to 4	3	0	0	1	1	1	1	0	0	0	0	0
4 to 5	0	0	0	0	0	0	0	0	0	1	0	0
5 to 6	0	0	0	0	0	1	0	0	0	0	0	0
6 to 7	2	0	0	0	0	0	1	0	0	0	0	0
More than 7	0	0	0	0	0	1	0	0	0	0	0	0
Disconnected	0	0	1	0	0	0	2	2	1	0	1	1
Abandoned	1	0	0	0	0	0	0	0	0	0	0	0
Busy	2	1	0	0	13	2	0	1	0	6	0	0

TO: Allen Doby, Executive Director,
Recreation & Community Services

DATE: March 30, 1990

FROM: John Risk, CATV Consultant

SUBJECT: Office of Cable Television Annual Report for Fiscal Year 1988-1989

During Fiscal Years 1988-89 and 1989-90, the City's Office of Cable Television implemented a variety of difficult changes to both the structure and organization of municipal cable communications in the City of Santa Ana. During its third year under the Recreation and Community Services Agency, the Office of Cable Television spent much of its time addressing issues related to modifications of the City's franchise agreement with Comcast Cablevision. These modifications were negotiated with Comcast as part of the March 6, 1989 out-of-court settlement resulting in a third amendment to the City's cable television franchise with Comcast. This compromise resulted in the resolution of several major challenges to the Agreement and also transferred municipal programming responsibilities to the cable company.

The body of this report is divided into five major sections:

- I. Franchise Administration
 - organization
 - cable television advisory board
 - customer complaints
 - franchise fees
 - annual technical performance
 - state of the art review
 - cable forum
 - other franchise documentation
- II. Franchise Amendment
 - review and modification of franchise amendment
 - surcharge credits
 - transfer of KCTY programming
 - I-Net development
- III. Engineering and Equipment
 - major equipment in need of repair
 - pending engineering projects
 - anticipated engineering costs
 - recommended equipment upgrades
- IV. Comcast Programming Activity and Productions
 - policy considerations
 - production activity
 - programming concerns
- V. Conclusions

In describing the performance in each of the sections listed above, references will be made to the corresponding graphs and charts which illustrate the information discussed in the text. Where possible, comparisons to the performance results of the previous year will be made.

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It is the goal of this fourth annual report to outline the valuable services provided by the Cable Office during the transition phase of Santa Ana cable administration and to outline enforcement and engineering practices for cable franchise administration in the near future.

I. CABLE TELEVISION FRANCHISE ADMINISTRATION

- ORGANIZATION

During the franchise modification period, the organization of the Office of Cable Television was greatly reduced in scope from that of previous years. On site franchise administration was reduced to two half-time contract administrative positions (John Risk and Sharon Hennegen) and one part time contract engineering position (Tom Bystry). Half-way through the fiscal year, Sharon Hennegen was promoted to another department, Tom Bystry's half-time duties were reduced to a 16 hours per week (Tom has since been replaced by Dan Booth); and a single 16 hour a week administration contract was made with Communications Support Corp.

Communications Support provides on-site franchise administration services in the following areas:

- a) Administrative guidance during fiscal year budget planning;
- b) Technical support to City Manager and Executive Director of Recreation and Community Services for cable television operations including cable programming and franchise compliance and administrative issues;
- c) Technical testing of I-Net and subscriber cables;
- d) Regulatory oversight in the operation of the I-Net;
- e) Contract administration support including local programming, outside vendor contracts, and contract engineering personnel;
- f) Review of existing operations, budgets, program requirements, objectives, and equipment inventory;
- g) Professional assistance to the Cable Television Advisory Board in various administrative areas: e.g., monthly customer service complaint logs, planning of annual public hearings, and state of the art performance analysis.

Dan Booth provides a variety of video engineering services under his 16 hour per week contract. These include:

- a) Consults with the Executive Director about repair and maintenance needs of all Agency owned audio and video equipment (valued in excess of \$ 600,000);
- b) Reviews and makes recommendations for repairs and service;
- c) Designs and installs electrical circuitry for existing and / or newly acquired audio or video equipment. This includes the facilities and equipment loaned to Police and Fire Departments;
- d) Establishes and maintains detailed equipment maintenance logs;

- e) Establishes and enforces Agency wide equipment use policies;
- f) Supervises annual asset management inventories;
- g) Makes tape duplications as required;
- h) Assists City Clerk and other users of the Council Chambers with regard to audio systems, television lighting, or other technical needs.

- COMMUNITY CABLE TELEVISION ADVISORY BOARD

One of the responsibilities of the Office of Cable Television is to provide administrative support for the Cable Television Advisory Board. These duties include the documentation of information on cable television issues for the Board's review, conducting research on local cable issues at the Board's request, and facilitating communications among its members, City management, and the community.

The Cable Television Advisory Board met monthly throughout the 1988-89 fiscal year. However, soon after the start of the 1989-90 fiscal year, (October through December, 1989) the Board's activities ceased while a membership restructuring was conducted. Upon the completion of this restructuring, regular monthly meetings commenced during January, 1990 in a similar format.

The Cable Television Advisory Board played a role in the review and facilitation of many of the activities accomplished by the Office of Cable Television. These activities are outlined in the body of this report.

- CUSTOMER COMPLAINTS

The Office of Cable Television recorded more than 300 complaints from subscribers who were unhappy about the performance and service response of the cable company. All complaints were individually handled and logged. Those complaints which dealt with situations where the subscriber was not satisfied with the way Comcast handled service problems were followed up until an adequate resolution was reached. Furthermore, all complaints logged with the City are reviewed on a monthly basis by the Cable Television Advisory Board.

Approximately 500 additional calls were logged by the City's Council Support Office during FY 1988-89, most of which were related to the surcharge implemented by Comcast. Consequently, the volume of customer complaints registered with the City was tremendously higher than that of prior years.

The chart on the next page details the types of complaints filed with the Office of Cable Television.

SUMMARY OF CUSTOMER COMPLAINTS RELATED TO CABLE TV

Month of:	07/88	08/88	09/88	10/88	11/88	12/88	01/89	02/89	03/89	04/89	05/89	06/89	Totals
Rates & Charges	4	7	9	21	40	54	39	40	20	0	1	5	246
Billing	2	0	0	2	1	5	1	5	3	0	0	2	19
Telephones	0	0	0	1	0	2	0	0	0	0	0	5	8
Tech. Service	0	2	2	3	2	4	3	0	0	0	0	4	19
Customer Service	1	0	0	1	0	2	1	0	0	1	1	3	10
Tech. Problems	2	1	0	1	1	1	1	0	0	1	0	1	9
Other ⁽¹⁾	0	0	1	2	1	2	2	0	1	0	0	1	10

Number of Phone Complaints:	287
Number of Written Complaints:	34
Total Number of Complaints: ⁽²⁾	321
Number of Individuals Contacting the City:	300

Notes: ¹ Includes complaints about programming and unwired areas.
² Does not include an estimated 500 calls made to Council Support.

- FRANCHISE FEES

The City is empowered under Federal law to collect franchise fees from cable companies operating within the City. These fees are intended to serve as compensation to the City for use of the public rights of way and to cover expenses to the City related to franchise contract administration. Franchise fee payments are calculated as 5% of Comcast's total gross receipts. The Office of Cable Television reviewed the records of Comcast's franchise fee payment to the Finance Department. The following chart summarizes the gross receipts of Comcast and the fee payments made to the City by the company in relation to their franchise fee obligations:

Payment Period	Gross Receipts	Franchise Fees Paid
07/88 - 09/88	\$ 2,129,934.60	\$ 106,496.73
10/88 - 12/88	\$ 1,967,544.20	\$ 98,377.21
01/89 - 03/89	\$ 2,087,560.16	\$ 104,378.01
04/89 - 06/89	\$ 2,553,826.80	\$ 126,691.34
TOTALS:	\$ 8,718,865.76	\$ 435,943.29

To confirm Comcast's computation of franchise fee payments, the City's Finance Department conducted an audit during the Spring of 1989. At that time, Comcast's books were audited from July 1, 1987 and December 31, 1988. No discrepancies were found. As required under our franchise agreement, revenues from Comcast's home shopping commissions and advertising sales were included in Comcast's reported gross receipts.

The Office of Cable Television concurred with the findings of the City's records.

- ANNUAL TECHNICAL PERFORMANCE - Subscriber network

On an annual basis, the Office of Cable Television conducts a technical audit of Comcast's subscriber and I-Net physical plant. Jonathan Kramer, the City's cable television technical consultant conducts this testing. The following summarizes Mr. Kramer's technical report findings regarding the operation of the cable system as well as a number of recommendations which were offered.

- a) Picture Quality - The Consultant found that the majority of the Grantee's subscribers would accept the picture quality at all of the test points which were inspected. Picture quality assessment, however, is only one subjective measure in determining technical compliance with the City's franchise, and is not directly mentioned in the Grantee's franchise or Part 76 FCC Guide lines as a test parameter.

As noted within the filed report, not all franchise and / or FCC guideline specifications were achieved initially, but all parameter discrepancies were either corrected by the Grantee after the failure was documented, or constituted 10% or less of the channels inspected at any particular test point.

- b) CPUC Construction Violations - One CPUC General Order 95 violation (line construction issues) was observed, which was related to an excessively low hanging drop cable across a public road.
- c) Underground Plant - The underground plant had degraded somewhat from its best condition which was observed last year. Typically, the underground locations which failed to meet city standards were observed to be lacking the special water seals installed in most other underground locations.

The consultant felt that the Grantee has proven the validity of its approach to upgrading its underground plant. The problem now seems to be that the technicians are not maintaining a system demonstrated to work to insure high standards.

- d) Overhead Plant - The overhead plant continues to operate reasonably well, but also shows signs of decreased maintenance based on the generally larger number of failures observed during the field testing.
- e) Overall Finding - We rated the Grantee Subscriber Network as having achieved compliance with the FCC technical guidelines at 23 out of 24 test points (95.8%).

When considering compliance with the Franchise Technical Standards, the Grantee achieved compliance with 100% of the franchise specifications at 17 out of 24 test points (71%). However, when considering compliance with the Franchise Technical Standards to the 90% standard which was used in previous years, the Grantee achieved compliance at 21 out of 24 test points (87.5%).

In each of the past 4 years, significant improvements had been made earning Comcast a performance rating of "outstanding". This year, however, the City has observed a significant degradation of the system as compared with previous year's results. Based on the decreased performance, the cable television office has downgraded Comcast's performance rating to "very good". (It is important to note that when compared with most cable television systems, including other systems operated by the Grantee, this system still is exemplary. The City's high technical standards, put in place to insure a large "operating margin", set the standard against which we judge this system.)

Subscriber Network Recommendations - Based on the performance of the Grantee's subscriber system (documented above), the Consultant made the following recommends to the City:

- a) Based on performance, recommended the Grantee's system be considered as having achieved satisfactory compliance on its Subscriber Network.
- b) Recommended that the Grantee's system be considered as having failed to achieve compliance on it's status monitoring of it's Subscriber Network.
- c) Recommended that the Grantee's system be considered as having achieved full compliance on it's Emergency Override System.

ANNUAL TECHNICAL PERFORMANCE - Institutional Network

I-Net Performance - As part of the 1989 performance review, the City's technical consultant conducted a performance evaluation on the I-Net. The evaluation lead to some unusual and potentially troubling findings. While the I-Net performance on the 'A' and 'B' legs was shown to be good to very good, based on objective parameter performance, the 'D' leg showed slightly degraded performance.

The performance of the 'C' leg (serving the southwest portion of the system) was judged unacceptable due to the failure of the reverse trunk to properly operate at two locations, and unacceptably high hum at two other locations. Two locations on the 'C' leg showed excessively high sweep response problems.

After the initial failures of the 'C' leg to carry reverse signals back to the headend, the Grantee did demonstrate reverse carriage after replacing defective filters at a common amplifier location.

Video performance, as observed on test monitors at the headend and in the field, showed that satisfactory video was generally provided.

In summary, the electrical performance of the I-Net was poorer than in the past years, and will need to be addressed by the Grantee. A re-evaluation of the I-Net will be conducted when the Grantee certifies repairs have been completed.

Status Monitoring System - The I-Net status monitoring system, which had never received a passing mark in previous evaluations, met and exceeded the 90% performance criteria established by the City during this evaluation. Out of 194 total reporting stations, 189 responded when polled.

Power Supplies - In connection with the I-Net evaluation, the technical consultant conducted an evaluation of the standby power supplies. These power supplies are designed to provide power to the system amplifiers, even during limited periods of commercial power failure. This permits, in theory, uninterrupted operation of the cable system. 20 power supply locations were selected for review including 7 I-Net power supplies. Of the 20 checked, 7 subscriber network power supplies operated correctly, while 6 subscriber network power supplies failed. Of the 7 I-Net power supplies checked, 5 failed. This is, of course, a poor performance mark against the Grantee's power supply maintenance program. This unsatisfactory showing requires that positive steps be taken by the Grantee to insure that "standby powering" are not merely words which appear in the franchise document.

Consultant's Recommendations - The recommendations made regarding the I-Net technical evaluation follow:

- a) The performance of the I-Net should be re-evaluated after the Grantee has performed repairs, and certified the completion of those repairs.
- b) The power supplies should be re-evaluated after the Grantee has performed repairs, and certified the completion of those repairs.
- c) The Grantee should be considered in compliance with the franchise requirement to provide status monitoring on the I-Net.
- d) During the 1990 performance evaluation, the I-Net should be evaluated for data signal integrity (as measured by "bit error rate") which was mutually agreed to by the City and the Grantee in the 1989 settlement agreement.

- STATE OF THE ART REVIEW

Beginning in July, 1988, a State of the Art Subcommittee of the Cable Television Advisory Board was formed to conduct research pertaining to "state of the art" cable television system improvements. The focus of the review was designed to compare Comcast's technical equipment and customer service processing techniques with those of other local cable operators and the cable industry as a whole. The Office of Cable Television gave direction to the subcommittee by designing a plan of action and outlining a list of issues which were to be considered by the company.

In November, 1988 Comcast was given notice to compile its State of the Art report for review by the Cable Board. During this time, the Cable Board was given further education on 'State of the Art' cable issues. Over the remainder of the fiscal year, the Cable Board and Office of Cable Television conducted formal hearings and documentation review. In March, 1989, the Cable Board issued its recommendations to Comcast on 'State of the Art' improvements. These issues were addressed by the company in follow-up meetings and written communications.

Appendix A outlines specific related issues which were addressed by the Office of Cable Television.

Some of the most significant state of the art issues include:

- a) Replacement of original cable converters with a new version which incorporates stereo sound, channel recall, and low heat power transformers;
- b) Implementation of new telephone answering system to improve customer service and provide more accurate record keeping;
- c) Channel realignment;
- d) Senior Citizen discounts;

The conclusion of the State of the Art review during the 1988-89 fiscal year was met with positive actions by Comcast to make improvements in their overall service. Comcast installed a new telephone answering system and increased the hours of operation for customer service and repair service. Also, included with Comcast's commitment to offer better service, was the addition of more customer service representatives and the development of a customer service representative training program for all personnel. Another accomplishment of Comcast was to relocate their local office to the City's Regional Transportation Center.

Regarding service rate considerations, Comcast voluntarily agreed to offer a Senior Citizen discount for subscribers in Santa Ana which includes service installation and one month service free of charge. The City also requested that Comcast implement a monthly rate discount for low income families. Comcast agreed to this request and will be implementing a "lifeline" tier of a limited number of channels for half of the basic subscriber price.

Pertaining to subscriber equipment, older converter boxes will be exchanged when required, and stereo service capability is being advertised on the local cable information channel.

- CABLE TELEVISION FORUM

On September 19, 1989 cable television subscribers had an opportunity to participate in a "live" viewer call-in program on KCTY cable channel 3 called "Cable Television Forum '89". This hour long program was designed to increase cable subscriber awareness of local cable issues and allow them to bring their questions directly to management of the cable company. Panel members for the program included members of the Santa Ana Television Advisory Board and the General Manager of Comcast Cable in Santa Ana.

Highlights of the program included a overview of the Cable Board's role in advising the City on improving cable television in Santa Ana and information on what Comcast was doing to improve its performance.

Viewers called in to participate in the program using a phone number presented throughout the show.

II. AMENDMENT TO THE FRANCHISE AGREEMENT BETWEEN COMCAST CABLEVISION AND THE CITY OF SANTA ANA

The 1988-89 fiscal year marked a significant change in the structure of municipal programming and cable television regulation in the City of Santa Ana. On March 6, 1989, the City of Santa Ana and Comcast Cablevision signed a third amendment to the Cable Television Franchise Agreement, settling a number of differences between them. Prior to the signing of the agreement, Comcast's failure to accept all the terms and conditions of the franchise transfer from Group W Cable had culminated in the cessation of municipal program funding and the filing of multiple lawsuits between the City and the cable operator.

The following summarizes some of the major provisions of the third amendment to the franchise agreement and the actions taken by the Office of Cable Television to monitor the agreement:

- SYSTEM INTERCONNECT

Due to the lack of support from affiliated parties, and the absence of sufficient funding, the regional system interconnect provisions of the franchise agreement were dropped. Instead, Comcast is expected to provide a two-way interconnect with Rancho Santiago College, California State University Fullerton, and the cable system serving the City of Garden Grove. Each interconnect is expected to provide at least on full-capacity channel in each direction. Costs associated with the interconnection with the Santiago Community College District will be covered by Comcast, while the cost for the Garden Grove and California State University Fullerton are to be provided by the Garden Grove cable operator and the University.

Office of Cable Television Review and Action:

The design plan for the Rancho Santiago College interconnect was been established by Comcast and preliminary engineering has begun. The Office of Cable Television will be monitoring the construction and implementation of the interconnect which is scheduled for completion by mid 1990.

Interconnect design planning with California State University Fullerton has been completed, however, interconnection with the cable system serving Garden Grove has not been established at this time due to the lack of interest of both parties to pay for such a project.

- CABLECASTING FACILITIES

The amendment to the franchise agreement had acknowledged that the cablecasting facilities which had been installed prior to the agreement would remain the property of the City and would be jointly used by the City and the cable company for video production and cablecasting. The cable company is expected to be responsible for the operation, repair and maintenance of those facilities. Personnel using the equipment are all expected to be prequalified by the City.

Office of Cable Television Review and Action:

The Office of Cable Television has continued the monitoring of the use of the cablecasting and production facilities for both City and cable company use. The company selected approximately \$ 100,000 worth of the original equipment which was sold in June, 1989. Approximately \$ 200,000 of assets were transferred to the City's Police and Fire Departments.

Another group of equipment currently in storage by the Office of Cable Television and valued at \$ 50,000 has been targeted for auction to other interested municipalities.

- SUBSCRIBER CREDIT

As part of the amended franchise agreement, Comcast was directed to credit all active subscribers a total of \$ 4.45 for each month they paid a surcharge on their bills. Comcast initiated this surcharge on March 1, 1988 due to the disagreement between the City and the company over community programming funding.

Office of Cable Television Review and Action:

Throughout the year-long surcharge period, the Office of Cable Television spent a great deal of time to counter the practices of Comcast in charging subscribers fees which which were unfairly represented by the company. With the assistance of the Office of Cable Television, the Community Cable Television Board established an action plan to inform citizens of the cable

company's actions, and supported efforts by the Orange County District Attorney's Office to investigate issues of possible consumer fraud.

The Office of Cable Television fielded hundreds of complaints from the public related to the surcharge and logged them for reference. The large number of complaints prompted the attention of the District Attorney's office which led to the request for the gathering of evidence on the issue. A 400 page evidence document was compiled for the District Attorney's Office regarding the surcharge. The District Attorney's Office is currently considering filing criminal fraud charges against Comcast.

Upon the signing of the franchise amendment, the Office of Cable Television proceeded to follow-up on Comcast's rebate commitments. This task required in-depth analysis of the specific rebate provisions of the franchise amendment and the follow-up on Comcast to provide adequate proof that all qualified subscribers received the rebates and or reinstatement of service to which they were entitled. By June 1989, it was determined that Comcast had conducted business in accordance with the surcharge rebate requirements set forth in the amendment.

III. ENGINEERING AND EQUIPMENT

The Office of Cable Television maintains an inventory of video and audio equipment valued in excess of \$ 600,000. Much of this equipment sees use by the City's Police, Fire, and Recreation Departments.

The City contracts with an independent engineer to provide 16 hours per week of on site repair and maintenance services. This individual (Dan Booth, and formerly Tom Bystry) also provides support services related to tape duplication, audio and video equipment set up, and technical support of the Council Chambers public address system.

Beginning with the next fiscal year, many of the Office of Cable Television's video equipment assets will require greater expenditures for repair and maintenance due to their aging conditions. Video equipment such as ours has a normal serviceable life expectancy of seven to ten years. Some of our equipment reached that age this year, other pieces will reach that age in the next two years.

The following is a summary of current engineering activity:

- MAJOR EQUIPMENT CURRENTLY IN NEED OF REPAIR

- a) Sony PVM-8220 Color Monitors - This type of monitor is used in both the editing and studio control systems. At least four of these units have experienced failure of the 'HUE' control. While their colors are erratic, the monitors are usable and each problem unit has a correctly working unit nearby for operator reference. The replacement parts are on order at a cost of under \$ 10.00 each. After arrival of the parts each unit should take approximately 1 hour to repair and realign;
- b) Tectronix Oscilloscope - The primary test instrument used in electronics alignment and repair. KCTY acquired this unit as unclaimed property from the Police Department and it worked well for some time. A similar, lesser quality unit belonging to KCTY is currently being used. The failed unit must be sent to the manufacturer's local repair center. Cost and time needed for repair are not known at this time, but should not exceed \$ 750.00;

- c) **Laird-Telemedia Film Chain** - This system, used to convert slides or film to television has potential for use by several city agencies. In addition to allowing existing slide shows to be put on video tape for easier use and/or distribution, it is one of the main sources for the large screen video projector in the Council Chambers. Currently an agency making a slide presentation for a televised Council meeting must bring two full sets of slides. One is used in a standard projector in the Chambers and the second is placed on the film chain for feed to the television control room. This is necessary because the camera mounted to the film chain is not of sufficient quality to provide clear images on the large screen of the video projector. The image being transmitted to viewers is of equally poor quality. If this system were fully operational slide presentations to the Council and other groups in the Chambers would be sent directly from the film chain to the video projector without the necessity of setting up a slide projector in Chambers. The existing Sony DXC-M3 camera is not currently used extensively for field production and would require only an appropriate lens (probable cost of less than \$ 750.00) to become an excellent film chain camera. The cost of a comparable quality new camera and lens dedicated to the film chain would be approximately \$ 6,000.00. This new camera would use CCD pickup elements rather than tubes and therefore would not require most of the regular alignments needed on the M3. Installation and alignment of either of these options would be done by Dan Booth.
- d) **Council Chambers Sound System** - The new Council Chambers sound system is functioning well after some initial problems caused mainly by a defective circuit card in the mixer. The VHS format tape deck which replaced the reel to reel system used by the Clerk of the Council is working very well for audio recording of meetings. A video feed will be installed from the control room to this deck as soon as possible to provide full video and audio records of proceedings which are televised.

- PENDING ENGINEERING PROJECTS

- a) **FAX Machines and RF Modems** - These were used in a test of data transmission, between Police facilities using the I-Net cable system. After completion of the tests the units were returned to Comcast and have been now passed on to the City. They will be tested, adjusted and aligned as necessary and then will be installed at various locations to provide FAX transmission, over the I-Net, between departments within the Recreation and Community Services Division.
- b) **Return of Flexibility to Editing System** - When the operations of KCTY were downsized and equipment was sent to other departments the central patching and distribution system was reconfigured. With this reconfiguration however, came a loss of some flexibility as well as loss of redundancy necessary to work around problems occurring during production. Users of the systems have requested certain features be made available again. This is a significant rewiring project and will take three to five days. Due to a failure of a computer hard drive all documentation for the modified system was lost. Creating new, correct documentation will require another two to three days.
- c) **Complete Alignment of All Production and Editing Equipment** - This full alignment is necessary to maintain high technical standards. The necessary alignments will take two full days for the editing system and one day for the on-air control room. These alignments will be done after the above mentioned rewiring. The video tape recorders are currently undergoing routine maintenance and alignment by Don Floyd. Three of the four machines used in the edit bay are now complete. Two additional days of Dan Booth's time will be required for the cameras and tape machines used for

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field production. Each of these projects is independent of the others and need not be done as a group. All work will be scheduled in cooperation with systems users to create minimal disruption.

- ANTICIPATED COSTS FOR THE COMING FISCAL YEAR

The cost of parts necessary for the ongoing maintenance and repair of the tape machines (video heads, lamps, belts, etc.), as well as a basic replacements inventory will be approximately \$ 3,000.00.

Several of the batteries used with the field equipment are nearing the end of their life expectancy and will have to be replaced over the next two years. Four different sizes of batteries are now necessary for just the cameras and tape machines used in the field. The monitors and lights require three more battery types with virtually no interchangeability. Several batteries of each type must be bought to allow a full day of production and each of these types require their own specialized charger. Costly inventories of batteries must be maintained even for equipment which is only used on rare occasions. With an investment of approximately \$ 1,500.00 for adapters and accessories all of the field units could be converted to a single industry standard battery type and mounting system. This type of battery mount is already used on the Betacam and appropriate brackets and adapters for the Hitachi cameras were purchased previously. The recently acquired Christie CASP computerized charging unit will provide excellent performance with Christie batteries including a 20 minute recharge cycle as opposed to the overnight recharge now needed for most of the batteries. The long term savings realized from this standardization will more than offset the one time cost of conversion. Expected cost for a full complement of batteries, either using one or multiple types, is \$ 6,000.00 which may be spread over two years. It is hoped that some of this cost will be borne by the Police and Fire Departments which now are the virtually exclusive users of the equipment.

It is recommended that the Recreation and Community Services Department meet with representatives of Police and Fire to determine how some of the costs related to maintenance and repair, and more importantly replacement, can be shared.

IV. PROGRAMMING AND PRODUCTION ACTIVITIES

Under the March 6, 1989 settlement between Comcast Cable Television and the City of Santa Ana, the cable company agreed to provide a specified amount of local origination programming to compensate for the City's cessation of its own municipal production staff. The programming to be produced by Comcast under the agreement was to follow formats similar to the original programming produced by the City's municipal cable channel (KCTY) before production was cut in 1988.

Office of Cable Television Staff and the Executive Director of Recreation and Community Services met initially on April 4, 1989 to discuss the transition of programming responsibilities of Comcast related to KCTY, City channel 3. Three groups of items were reviewed:

- a) Policy Items - having to do with security, insurance, "on-call" maintenance, channel override, channel identity, and guidelines for scheduling interviews with Council members and key City staff, credits, scheduling, tape library use and upkeep, etc.;
- b) Programming Items - having to do with types of programs to be produced, timetable for productions, identification of Comcast crew members to be assigned to City

productions, identification of City staff members who may serve as resource representatives, etc.;

- c) Equipment Items - having to do with transfer of assets to Comcast such as transfer of title, registration, and cancellation of the 'E' license plate related to mobile TV truck, transfer and removal, if necessary, of certain equipment designated for sale to Comcast, etc.;

In September of 1989, and monthly thereafter, City staff met with Comcast personnel to review the status and quality of Comcast's production and programming activities. The following summarizes KCTY activity:

- a) CITY COUNCIL MEETINGS - Comcast is required to produce live telecasts of City Council meetings on the first and third Mondays of each month. Videotapes of these meetings are to be replayed a least three times to ensure maximum availability to the community. A new introduction and on-line production titles and agenda items were to be included in the City Council coverage. On April 17, 1989 Comcast began its live coverage of the Santa Ana City Council. Production quality of these programs is similar to that produced by the City. Problems have occurred, however, during the playback of these meetings. The company has made efforts to rectify these problems.

Meetings are being replayed at 10:00 A.M. on the day following the meeting, 6:30 P.M. on the following Wednesdays, and 1:00 P.M. on the following Sundays.

- b) "SANTA ANA NOW" - Comcast was directed to resume production of KCTY's news and information program the "KCTY Update". "Santa Ana Now" promotes upcoming City functions and features local events in a news magazine format. Each program lasts at least 15 minutes and features an average of 10 stories per show, three of which are accompanied by video footage shot within the community. Comcast was instructed to utilize City publications as their major information sources for program topics and were to coordinate interviews with Council members and high level City staff through the Council Support Office. Scripts are approved by the Executive Director of Recreation and Community Services.

The production output for "Santa Ana Now" is scheduled to be biweekly with a total of 24 individual programs produced over each year. Daily telecasts of "Santa Ana Now" alternate with other specials and sports programming during the week. Production of "Santa Ana Now" began on May 1, 1989.

- c) SPORTS AND ACTIVITIES SHOWS - Comcast has been directed to cover a number of City sporting events two times each month. These programs feature children and seniors participating in activities conducted throughout the City such as Little league, Pop Warner, Senior Citizen Crafts, volleyball, basketball, etc.

Starting in May, 1989 Comcast began coverage of these events as obligated.

The City has requested that Comcast involve a greater number of children and minorities in each episode. Comcast has improved in this area, but further emphasis will be applied, especially regarding employment of minority talent.

- d) MAJOR CIVIC EVENTS - Comcast has agreed to produce the following five major events: "Golden City Days", "Black History Parade", "Golden City Bike Race", the "July 4th Celebration", and "Mexican Independence Day". In July, Comcast adhered to this obligation by covering the 4th of July Celebration held at the City's stadium.

- e) **SPECIAL PROGRAMS** - We define specials as being no less than 30 minutes in length and formatted in either of two styles: public affairs (talking-heads taped in studio, some taped live); or documentary (magazine format, e.g. "Eye on LA", or "2 on the Town"). These are considered substitute programs for KCTY's popular series "Visions" and "Safe and Sound".

Comcast has outlined the scheduling of all of these programs and since May has produced four of them under the title of "Talk about Town", hosted by Michelle Ruiz. The topics of these programs have been the Bowers Museum, fire safety, the 1990 census, and issues pertaining to city management.

Comcast assisted the Cable Television Advisory Board in televising the Cable TV Forum held in September, 1989.

- f) **SPECIAL EVENTS** - A total of twelve special programs were agreed to and basically are outlined by the City to include coverage of Santa Ana events affiliated with City organizations such as the Chamber of Commerce, YMCA, Boys and Girls clubs, and special City sponsored events.

Comcast has thus far produced programs including the opening of the Southwest Senior Citizen's Center, the Chamber of Commerce Board Installation Ceremony, a program on a meeting of Mayors and transportation experts on southern California traffic, Tournament of Champions, Arts and Cultural Alliance, Disaster Preparedness, and a feature on a Bowers Museum exhibit.

- OVERALL PROGRAMMING CONCERNS

Overall, we are satisfied and impressed by Comcast's production personnel, their attitudes, and the quality of their work. City staff and Comcast staff meet monthly to share ideas, offer critiques, and make plans for the next month.

Our biggest concerns during the first year under the amended agreement are with programming and playback issues. These include channel identity, spelling of alphanumeric text, playback personnel accuracy (i.e. programs starting and stopping on time and without long periods of black); frequency of playback hours; and airing of tapes from other cable systems.

Crews are required by management to wear KCTY or Comcast shirts but greater encouragement by Comcast supervisors is needed. More frequent reference to KCTY call letters is also encouraged and more frequent reference to the City of Santa Ana has also been emphasized in meetings between City staff and Comcast. Playback is being increased with the activation of automatic playback equipment, and other issues are being closely monitored by staff.

V. CONCLUSIONS

Approximately 50% of Communications Support staff time is spent on assignments related to franchise administration and 50% on programming needs of channel three and video needs of City agencies. This ratio may change under future scenarios.

With Federal legislation brewing in Washington, the City's Cable Television Advisory Board and the City's franchise administrators may find their regulatory powers increased during the next few years. Special lobbying efforts and periodic educational sessions are recommended to follow these legislative changes as they are adopted.

As the relationship with Comcast concerning City programming continues to mature, the City may wish to reassess the benefits of the current agreement. Many City agencies are becoming aware of shortcomings arising from the City's loss of direct control over KCTY production activity. The greatest of these are:

- a) Decreased access to playback information (dates, times, etc);
- b) Difficulties in obtaining duplicates of program materials;
- c) Delayed access to alphanumeric text announcements;
- d) General loss of Citywide channel identity;
- e) Overall loss of editorial control.

Another topic for the City to address in coming months is the matter of long range planning for equipment maintenance, repair, and eventual replacement for the various television production facilities in operation by Police, Fire, and Recreation. Costs and frequency of failures will rise as a function of equipment age. A coordinated effort is needed by all users to budget and plan effectively. The current level of on-site video engineering services (16 hours per week) may become insufficient to meet the needs of future years. This matter should be addressed annually as the equipment continues to age.

Thirdly, the City should continue to assess the role of cable and video in its emergency preparedness and disaster response operations. The I-Net is a potential resource in this regard. Fire Department use of I-Net for training remains high, however, the system was somewhat under utilized in the City's recent disaster training exercise.

Finally, continued enforcement of provisions of the Franchise Agreement is essential. A well documented history of operator performance is dependent on regular and frequently conducted performance reviews. The current level of franchise administration (16 hours per week) is the absolute minimum for this to be achieved.

SANTA ANA SERVICE CALL BREAKDOWN BY MONTH-----COMCAST CABLEVISION

MONTH	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
# WEEKS/MONTH									4	5		
HEADEND	0	0	0	0	0	0	0	0	0	1		
PLANT	91	101	65	71	63	85	68	67	42	50		
DROP	243	285	302	333	325	292	235	185	199	249		
CONVERTER	259	290	339	341	349	371	201	287	273	329		
POWER FAILURE	0	0	0	0	0	0	0	0	0	0		
NON SYSTEM	131	138	161	196	171	193	136	144	145	171		
NO FAULT FOUND	139	124	140	135	155	171	124	118	85	96		
NOT AT HOME	188	194	128	139	152	154	126	98	97	139		
OTHER	0	0	0	0	0	0	0	10	22	30		
TOTAL TRUCK TRIP:	1051	1132	1135	1215	1215	1266	890	909	863	1065		
CLEARED BY PHONE:	27	34	47	44	61	62	34	37	29	39		
SERV. CALL RATIO:	4.6%	4.8%	4.8%	5%	5%	5%	3.7%	3.8%	3.7%	4.4%		
MAJOR OUTAGE/U	1	3	0	1	0	0	1	0	1	2		
MINOR OUTAGE/U	5	3	5	3	8	7	1	3	2	5		
PLANNED OUTAGE	0	0	0	0	0	0	0	6	5	7		
NEW INSTALLS	988	1585	1327	1521	1485	1332	988	1036	865	832		
DISCONNECTS	1074	941	1104	1314	1362	1325	1548	1278	1246	1114		
POWER SUPPLY		56	82	15		10	106	14	10	9		

Customer Service
Telephone Report

Date: 11/01/90

Report Period

From: 10/01/90 To: 10/31/90

Group Report

TOTAL CALLS

NUMBERS DIALED

Received : 69485	ARJ : 15184 41%	Santa Ana : 403 37%
Aban Main : 9655 14%	Spanish : 2673 7%	Fullerton : 296 27%
Aban Secd : 62 0%	Billing : 8933 24%	Newport : 180 16%
Defaulted : 22803 33%	Service : 9077 25%	Buena Park: 120 11%
Dialed Q : 18010 26%	Office Loc: 1158 3%	Seal Beach: 97 9%

Voice Mail: 341 1%
Based on Calls To Q

Percent of Subscribers Calling : 80.80%
Percent of Subscribers Reaching Q : 47.46%

Trunks Busy (Hrs) : 0.00

Q Report

Reached Q : 40813 59% Answered : 37909 93%
Held in Q : 25889 63% Abandoned : 2904 7%

	Time To Answer	Call Duration	Hold Time Until Abn	Hold Time Until Redir
Under 12 Seconds :	36% 36%	3% 3%	30% 30%	13% 13%
12 to 30 Seconds :	19% 55%	7% 9%	19% 49%	13% 25%
30 to 60 Seconds :	11% 66%	17% 26%	24% 73%	13% 38%
1 to 2 Minutes :	16% 82%	27% 53%	15% 88%	13% 50%
2 to 3 Minutes :	8% 90%	16% 69%	7% 94%	13% 63%
3 to 5 Minutes :	7% 97%	16% 85%	4% 98%	13% 75%
5 to 10 Minutes :	3% 100%	12% 97%	2% 100%	13% 88%
Over 10 Minutes :	0% 100%	3% 100%	0% 100%	13% 100%

**Report to the
Clark County Board of Commissioners
and the
Vancouver City Council
from the
City/County Cable Television Commission**

**PROGRESS REPORT ON THE
COLUMBIA CABLE VANCOUVER/CLARK COUNTY
FRANCHISE AGREEMENT**

**YEAR NINE
MARCH 1991**

I. INTRODUCTION - BACKGROUND

This is the ninth annual report by the Vancouver/Clark County Cable Television Commission ("Commission") reviewing the status of the franchise agreement with the cable operator, Columbia Cable of Washington ("Columbia").

The format of this report is consistent with the eight previous evaluations of the cable operator's performance (Cox Cable, and as of June 1986, Columbia Cable). The review will focus on calendar year 1990, although where appropriate more recent developments will be noted. Comments regarding overall performance by the operator are also contained in this review.

II. METHODOLOGY

Columbia's performance was evaluated through a variety of mechanisms. The foundation for the review was the traditional exchange of correspondence between the cable operator and the Cable Television Office. That correspondence is available as an appendix to this report. The Commission also reviewed correspondence and calls to the Cable Television Office during the past year and testimony which was offered during the public meetings of the Commission.

In addition, the Commission conducted a formal Public Evaluation Session of Columbia's performance in November 1990, as required by city and county ordinances. Testimony and phoned call-in comments received during that session are also incorporated into this review.

III. FRAMEWORK FOR EVALUATION

As it has done for the past eight years, the Commission continued to evaluate Columbia's performance against the findings and conclusions developed by the Commission in May 1981, when it recommended that the cable television franchise be awarded to Cox Cable. Although some of the findings have become outdated and compliance has long been accomplished in some instances, the Commission finds these criteria to be important benchmarks against which to evaluate Columbia. In acquiring the Cox Cable system in 1986, Columbia assumed all franchise obligations of Cox and is evaluated accordingly.

For the record, those findings and conclusions which ranked the original Cox proposal first in May 1981, by which we now measure Columbia's performance, are as follows:

- A. Good engineering and system design
- B. Good provisions for interactive services
- C. Good emergency override facilities
- D. Staffing and equipment for 24-hour service status monitoring and good standby power facilities
- E. Sound financial structure
- F. Excellent access and local origination plans
- G. Good programming
- H. Good local training and access support
- I. Good overall Washington State coverage
- J. Extensive institutional system design
- K. Good construction time
- L. Basic rate commitment of three years

- M. Responsiveness to the special qualities of Vancouver and Clark County

IV. PERFORMANCE EVALUATION SESSION III

Both the City of Vancouver and Clark County cable television ordinances require that the Commission conduct formal public evaluation sessions regarding the cable operator's performance in the third, sixth, ninth, and twelfth years of the franchise agreement. The performance evaluation session for year nine of the franchise agreement was conducted during the Commission's regular meeting on November 7, 1990.

The evaluation session, as are all regular Commission meetings, was televised live on the government access channel, CVTV Channel 40. An opportunity was provided for citizens to call in comments during the meeting, as well as to testify in person.

During the 30 minutes in which citizens could call in their comments, a total of 18 phone calls were received. A detailed summary of citizen comments is contained in the minutes from the November 7 meeting, which are available from the Cable TV Office. The majority of the calls dealt with individual service problems, all of which were addressed personally by the Columbia General Manager the following day. Several of the callers did voice complaints about the need to have converter boxes with cable-ready television sets and the related problems of multiple remote controls and VCR connections with the current Columbia configuration. This concern was echoed in testimony before the Commission during its March 6, 1991 review of the progress report.

It should also be noted, that while not part of the formal evaluation session in November, a number of citizens appeared at the October 3, 1990 meeting of the Commission to express an interest in having Columbia add a Spanish-language network to the channel lineup. The Commission also received many letters of support from community leaders for such a programming addition.

The Commission does not have jurisdiction to require that the cable operator add or delete a specific programming service. However, the public forum and discussion of the issues provided valuable information to Columbia. As will be noted elsewhere, effective March 4, 1991, Columbia

added Univision, which is a Spanish-language channel, as well as Black Entertainment Television (BET).

The Commission continues to be pleased with the response from the community when opportunities are provided to call-in comments. The Commission will continue to make such opportunities available to cable subscribers at least once or twice a year.

The next formal public Performance Evaluation Session within the ordinance requirements will be scheduled for the fall of 1993 (year twelve of the franchise agreement).

V. HIGHLIGHTS OF YEAR NINE PERFORMANCE REVIEW

The Commission is pleased to again report that Columbia Cable is currently in compliance with the franchise agreement and that there are no unresolved issues between the franchisee and the regulatory authorities.

The Commission continues to be very satisfied with Columbia's performance, as well as its responsiveness to the community. The number of subscriber complaints to the Cable TV Office increased slightly in 1990 (58) from 1989 (43), but almost a quarter of the calls in 1990 were people who had encountered difficulties in obtaining new cable service. It should also be noted that the total number of Columbia Cable subscribers increased in 1990 to 41,028. This is an increase of 3,246 from 1989.

During 1990 Columbia completed a total upgrade and rebuild of the Camas/Washougal cable system which resulted in all of Clark County now being served from the Vancouver head-end; and, thus, receiving the same channel lineup including access stations.

As was noted earlier, in response to community requests, Columbia added two new programming services on March 4, 1991: Univision (Spanish-language) and Black Entertainment Television (BET). Despite technical problems with the Washington State Network (WSN) service during late 1990, the Commission acknowledges Columbia's efforts in bringing this unique programming to our community. If it were not for WSN, Vancouver/Clark County would have no televised access to Washington state news and public affairs programming. The Commission does hope to

work with Columbia during 1991 to increase community awareness of this important cable programming service.

An area of continuing concern to cable subscribers which has been noted in previous reports is the incompatibility of the Columbia system with cable-ready television sets. In simple terms, what this means is that all subscribers must have a converter box to receive any of the cable networks including "basic" service. This also makes full utilization of the technology of VCRs and single remote control units difficult. Columbia is the only cable system in the Portland metropolitan area which has this technological configuration.

However, Columbia has made some progress in this area over the past year. Specifically, Columbia has "unscrambled" the Portland broadcast stations so that they can be received on cable-ready sets without a converter, and the company has initiated a public information campaign to ease use of VCRs with the cable system.

Columbia Cable management has also advised the Commission that it is seriously studying the new technology of "interdiction" which means having a converter-like device outside of the home on the pole so that cable-ready television sets can be utilized without having a "box" inside the house. The technology of interdiction is still being tested and is expensive to implement. However, it is anticipated that costs will decline as use of the technology increases. Columbia will likely decide within a year or two whether to introduce interdiction in Vancouver/Clark County.

The Commission is confident that Columbia is hearing the concerns of subscribers "loud and clear" and that as soon as an alternative technology is economically and technically feasible, that the current converter box system will be replaced with a more consumer friendly service.

In response to concerns from the Commission and the public, Columbia instituted a series of customer service improvements in early 1991. These include longer hours of operation at the Customer Service Center on Saturdays, as well as more customer service representatives to help subscribers and reduce their waiting time in lines. Other improvements are extended hours in repair and dispatch, and more complete, customer-friendly printed informational materials.

Columbia's overall support of and commitment to PEG (public, educational, and government) access programming continues to be strong. The numbers of people trained in the local public access facility are steadily increasing, as are the number of programming hours produced.

Communication between the operator and the Commission continues to be excellent and Columbia has been timely in providing information which requires action by the Commission.

VI. COLUMBIA YEAR NINE PERFORMANCE -- SUMMARY ANALYSIS

A. Construction

- System mileage as of January 1991 was 1,173.35 miles of "A" cable plant (664.50 miles aerial and 508.85 miles underground). This represents an increase of 71.35 miles in plant during 1990 as opposed to 38 miles built in 1989. A total of 80,610 homes are now passed by the cable system, an increase of 3,982 homes during 1990. (As a footnote, the original Cox franchise proposal did not project passing 80,000 homes until year 12 of the franchise.)

In addition, 27 miles of "B", or institutional, cable are in place. This number is constant with previous reports as no new construction of the "B" cable has occurred since 1986. A current map detailing constructed areas is on file in the Cable Television Office. A reduced copy of the map is attached to this report.

- Columbia is responsive to requests for service in unconstructed areas, although many requests are received from homeowners who live in sparsely populated areas where the operator is not required to build under the terms of the franchise agreement. Columbia is in compliance with franchise ordinance requirements.
- No requests were submitted by Columbia under the "Hard to Serve Sub Area" designation during the past year.

- System design and reliability remain in compliance with franchise requirements. Columbia continues to demonstrate a strong commitment to providing the best system possible with existing technology.
- No new requests for institutional uses of the cable system were received by Columbia in 1990. It is still anticipated that Columbia will be able to serve mandated institutional users within current system capacity for the life of the franchise (1996).

B. Rates

The Commission and legislative bodies have no authority to regulate rates under the Cable Policy Act of 1984. However, it is appropriate to monitor rates as this is a factor to be considered in evaluation of the overall performance by the cable operator. Columbia increased rates for basic service from \$16.15/month to \$17.50/month in January 1991. This rate remains lower than those charged by other cable operators in the Portland metropolitan area and the State of Washington. Most of those systems surveyed include fewer channels than does Columbia in the "basic package." (A table comparing Columbia's rates with other communities is attached as Chart 1; however, it should be stressed that the survey is an approximate, not an exact comparison of costs.) A table of all current monthly rates and other charges in Vancouver/Clark County is included in the information provided by Columbia.

Formal complaints to the Cable Television Office regarding rate increases continue to be very few. The Commission does remain concerned about ever-escalating costs of cable service to consumers, and will keep the legislative bodies advised of pending federal legislation and Federal Communications Commission (FCC) rulings which may impact local regulatory authority in this area.

C. Programming

- The programming lineup for the Columbia Cable system remained constant during 1990. As noted elsewhere, as of March 4, 1991, Columbia will add Univision, a Spanish-

language channel on channel 52 (replacing a "test" channel), and Black Entertainment Television (BET) to Channel 61 (replacing E! cable service). A current channel lineup and a listing summarizing programming modifications are included in the material provided by Columbia. All channels are currently programmed.

- As part of its review process, the Commission monitors the "mix and quality" of service offered by the cable operator. The 1984 Cable Policy Act allows local regulatory authorities to review the mix and quality of service. It is within this context that the Commission reviews programming changes made by Columbia. With the addition of Univision and BET in early 1991, Columbia has enhanced the mix and quality of service from that required by the franchise agreement. Chart 2 compares the mix and quality of service as originally proposed in 1981 to that offered in 1991.
- Washington State programming continues to be offered on the Washington State Network (WSN). Included in the materials submitted by Columbia is a listing of programming offered on WSN. As noted earlier, the Commission hopes to work with Columbia to expand community awareness of this important and unique programming service during the coming year.
- The challenge of making local and WSN programming information easily accessible to the community is of continuing concern to the Commission. The Commission is heartened to learn that the Vancouver City Manager is also trying to address this issue with management at *The Columbian* newspaper which publishes the most commonly used TV guide in Clark County. Columbia is in compliance with all requirements in this area.
- Local origination programming on KCOL Channel 25 meets franchising requirements and offers a variety of local programming. It should be noted that KCOL produces the only consistent live local newscast five days a week. Clark County Newswatch airs three times daily on Channel 25 and

twice daily on CVTV Channel 40 as a public service. A complete list of Channel 25 programming is included in the materials submitted by Columbia.

- As part of its local programming offerings, Columbia is the official television network which produces the tape-delayed cablecast of Portland Winter Hawks hockey games during the 1990-91 season. Columbia is to be commended for the growth in its production department that resulted in the television contract with the Winter Hawks.
- Copyright fees which would be paid by Columbia continue to make reinstatement of WOR (New York) economically unfeasible. No plans are contemplated to reinstate the service in 1991. In addition, at this point, WOR could not be added without deleting another programming service.

D. Consumer Services

- The Commission finds Columbia to be responsive and timely in dealing with customers' complaints and requests for repair service. Indicative of the company's philosophy in this area is the testimony of the Vice President and General Manager, Cal Broussard, when he stated at the November 7, 1990 Commission meeting, during the Performance Evaluation Session that "Columbia Cable cannot prevent....equipment and system breakdown problems. However....rudeness and curtness from any employee will not be tolerated...."

The total number of subscriber calls regarding operator service received by the Cable Television Office in 1990 increased slightly to 58 from the 43 received in 1989. However, it is important to note that the total number of subscribers also increased by more than 3,000. The percentage of complaint calls received by the Cable Television Office is still less than .1% of the total number of subscribers. While the cable operator strives for a "zero" complaint rate, it should be commended for its responsiveness and the small percentage of calls actually

received by the regulatory office. Most regulatory offices across the country would be envious of this call rate.

- As noted in the highlights section of this report, Columbia instituted a number of customer service improvements in early 1991 in response to Commission and subscriber inquiries.
- Columbia continues to provide parental lock boxes at no charge which exceeds the requirements of the cable ordinances and the Cable Act of 1984.
- The Commission has appointed a subcommittee which is drafting customer service standards within its rule-making authority. If specific standards are proposed and adopted, it would not be in response to any problem with Columbia performance but to establish guidelines which any operator must follow.
- As of December 31, 1990, Columbia Cable had 41,028 subscribers in Clark County, an increase of 3,246 from 1989.

E. Access Programming

- Columbia is in compliance with the franchise requirements regarding access programming.
- Use of the public access facility at Hudson's Bay High School continues to increase. In 1990, 83 people completed the beginning workshop as opposed to 68 in 1989. A total of 41 people completed the advanced workshop in 1990 compared to 29 in 1989. A total of 98 programs were produced at the access facility in 1990 comprising 72 hours of programming. This demonstrates a steady increase in programming from previous years -- 77 programs in 1989; 49 programs in 1988. Total hours of use per week have also increased. The access facility was used an average of 27.5 hours a week during 1990 in contrast to 20.4 hours a week in 1989.

- The interconnect of the Vancouver/Clark County Community Access Channel to the Portland metropolitan area Community Access Network (CAN) has proven to be a popular vehicle for showcasing locally produced programming. Currently, Vancouver/Clark County is allotted six hours a week on the CAN Network to schedule locally produced programming. Columbia is to be acknowledged for support of the complex yet innovative system and for troubleshooting and correcting technical problems when they occur.
- Columbia is in compliance with equipment requirements for the public access facility. Some equipment was replaced and upgraded during 1990. A complete inventory of access equipment is included in the material submitted by Columbia.
- Columbia has continued an active outreach program to promote use of the public access facility. The efforts of the Community Access Director in this area are deserving of particular mention.
- Columbia is in compliance with its requirements to designated access users and is current with grant payments to TV ETC, the educational consortium. A total of \$58,000 was paid by Columbia to TV ETC in 1990. This represents a total of \$406,000 paid to TV ETC to date as part of the total \$750,000 which the operator is required to remit over the life of the franchise agreement. In addition, Columbia replaced some of the character generators originally provided by Cox to selected public agencies.
- TV ETC has maintained a consistent reporting relationship with the Commission during 1990. The Commission remains impressed with the quality and variety of programming offered on the educational access channels, including "Homework Helpline" which airs live from Mountain View High School. The local K-12 educational community is to be commended for its innovative uses of the cable system for delivery of instructional and informational materials to teachers, children, and parents.

The Commission is concerned at the absence of locally originated educational programming on the cable system by higher education institutions. The Commission will direct staff to work with representatives of higher education during the coming year to determine what future uses might be made of the local cable system.

- The Commission again commends the Washington State School for the Deaf for the programming it originates for the hearing impaired on Channel 47. The number of hours of programming per week on that channel have increased to 57.5 during the 1990-91 school year.
- The variety and quality of access programming produced on all eight PEG access channels continues to expand and improve, and Columbia's support and technical maintenance of those channels is noted. In addition, Columbia's assistance in relocating the technical facilities of the City/County Cable TV Office, as well as the Vancouver School District's reconfiguration of playback arrangements for Channel 54 is appreciated and exceeded franchise requirements.

F. Special Services

- Delivery of interactive services by the cable operator is a topic of annual review by the Commission. The economics and technology do not yet support development of interactive services by Columbia, and it is the Commission's determination that the operator should not be required to provide such services in 1991. Experience to date suggests that interactive services provided through computer and telephone interface have proven to be more consumer friendly and responsive than services which can be provided through the cable system and the home television set.

G. Technical Performance

The continuity of service, signal quality, and compliance with FCC standards by Columbia remains outstanding. Outages are relatively few and in 1990 the average duration was 52 minutes. This average

is well under that experienced by many cable systems across the country.

H. Financial Performance

- There have been no changes in ownership or the financial structure of Columbia during the past year. The Commission will monitor developments which may impact Columbia's ownership, as well as its financial standing in light of the current economic climate and the interest of some major investors (primarily insurance companies) to divest their cable holdings. However, no problems or concerns are noted at this time.
- The Clark County Auditor's Office conducted an audit in late 1990 to determine whether all revenues had been reported to the County in accordance with Columbia's franchise agreement with the County. The audit report was positive and indicated that all payments had been made in accordance with the franchise agreement. Independent comments from the auditors expressed appreciation for Columbia's assistance and cooperation during the audit process. A copy of the audit report and Columbia's response are available as an appendix to this report.
- Columbia International owns five cable systems with a total subscriber count of 204,812. This is an increase of 17,764 total subscribers from 1989.

The systems operated by Columbia are as follows:

<u>Location</u>	<u>Subscriber Count</u>
Ann Arbor, Michigan	58,431
Washington County, Oregon	55,285
Columbia Cable of Virginia	38,780
Gardnerville/Fallon, Nevada	11,288
Columbia Cable of Washington	41,028

I. Compliance with the Cable Policy Act of 1984

The Commission, in those areas it monitors, finds Columbia to be in compliance with all locally and federally enforced provisions of the Cable Policy Act of 1984. The Commission is pleased to note that Columbia continues to exceed its EEO requirements as mandated by the Act. Columbia is also to be commended for its policy of developing opportunities for employee growth and promotion from within the organization.

J. Overall Performance

Columbia continues to meet or exceed franchise requirements and expectations for its overall performance, as well as its responsiveness to the Vancouver/Clark County community. While not cable-related, the company supports many community activities and its efforts in this area are also noted. More importantly, however, the overall quality of service and performance are outstanding. Columbia Cable of Washington remains a model of excellence which its colleagues across the county would do well to emulate.

VII. CABLE TELEVISION COMMISSION ACTIVITIES

Stephen Horenstein continued to serve as Chair, and Marg Nelson continued to serve as vice-chair of the Commission in 1990. At the March 6, 1991 meeting of the Commission, Marg Nelson was elected Chair and Richard Cherry was elected Vice Chair. Mr. Horenstein announced his resignation from the Commission effective April 1.

The Commission welcomed two new members in 1990. Richard Hammerstrom replaced Sid Brown, who resigned, and Mark Engleman replaced Bruce Russell, who had served the maximum number of terms allowed by the City Council.

The Chair of the Commission appointed a special subcommittee in late 1990 to develop draft customer service standards within the Commission's rule-making authority as outlined by ordinance. It is anticipated that the subcommittee will have a draft to submit for full Commission consideration by late spring of this year.

The Commission revised the rules and procedures for the operation of the Community Access Channel, Channel 38. In recognition that the initial work of the Community Access Advisory Board (CAAB) was complete, the Commission thanked the CAAB members for their service. The CAAB is currently "inactive," and appeals to staff decisions regarding scheduling of the access channel can be brought directly to the Commission for consideration. Should circumstances merit, new CAAB members can be appointed or a special task force can be established to deal with specific issues.

The Commission worked with legal counsel in 1990 to review its authority in the area of requiring owners of multiple dwelling units to allow access by cable operators upon the request of tenants. The Commission is supportive of the enactment of state legislation which guarantees the rights of tenants of MDUs to access cable television service while establishing a process for just compensation to property owners for providing such access. A resolution on this matter has been adopted unanimously by the Commission and has been forwarded for the City Council's and Board of County Commissioners' consideration. It is the Commission's belief that in a community such as Vancouver/Clark County where the only consistent local news and public affairs programming about the local community and Washington State is offered by the cable television system that all residents should have the right to chose to receive this service if it is available to their residence.

Major work items for 1991 include:

- A. Ongoing review and monitoring of state and federal legislation, as well as FCC rulings impacting local authorities.
- B. Refine and monitor long-range plan for implementation of the institutional uses of the cable television system, including possible uses by the local higher educational community.
- C. Implement procedures as necessary to conform to legislative and federal regulatory mandates as may be required by amendments to the Cable Policy Act of 1984.

- D. Explore with Columbia Cable ways to increase community awareness of public affairs and local news programming services on the local cable system, including Washington State Network.
- E. Determine whether to proceed to adopt customer service standards.

VIII. SUMMARY

The Commission continues to be impressed with the performance by Columbia Cable in year nine of the franchise agreement. The responsiveness to the community demonstrated by the cable operator, as well as the willingness to work with the Commission on issues of mutual concern have made for a positive partnership on behalf of the citizens of Vancouver/Clark County since 1986 when Cox sold the franchise to Columbia.

The world of cable television has changed in many ways since the original franchise was awarded in 1981, but one thing that has remained constant is the Commission's commitment to ensuring that the promise of cable television is maximized in the community. As the news and public affairs offerings continue to increase through both national and local programming services, cable television fills the information vacuum that is created by the absence of a local broadcast television station and the lack of an AM or FM radio station that provides programming 24-hours a day for Vancouver/Clark County. It is the resource of cable television that provides the citizens with a vital link to the local community and the State of Washington.

The financial condition of Columbia Cable is sound, the subscriber base is strong and growing, the technical quality of the system is excellent, and the cable operator is in compliance with all provisions of the franchise. The Commission is pleased to present this positive report to the legislative bodies at the conclusion of year nine of the franchise agreement.

CHART 1
CABLE RATES SURVEY
1991

E. MULTNOMAH CO. (OREGON) - Julie Omelchuck (503) 248-3576

(Paragon)

Basic: \$25.21 (includes converter w/remote)
46 channels included in basic

Premiums: \$3.10 - \$11.00 single
\$12.58 - \$19.95 packages

EAST PORTLAND - David Olson (503) 796-5385
(Marybeth Henry)

(Paragon)

Basic: \$25.21 (includes converter w/remote)
46 channels included in basic

Premiums: \$5.95 - \$10.45 single

WEST PORTLAND - David Olson (503) 796-5385
(Marybeth Henry)

(TCI)

Basic: \$19.12 (Converter chg. w/remote \$3.15; w/o remote \$2.10)
[Recent rate increase from \$17.33 7/90]
44 channels included in basic

Premiums: \$10.95 - \$11.70 single

SPOKANE - Glen Lipsker (509) 456-2644

(Cox)

Basic: \$18.77
36 channels included in basic

Premiums: \$9.03 - HBO, Disney, Movie Channel
\$6.93 - Showtime

TACOMA - Marc Pease (206) 591-5168

(TCI - City)

Basic: \$21.03 (.75 senior discount)
40 channels included in basic

Premiums: \$13.95 - HBO
13.40 - Showtime, Cinemax
12.03 - Disney

(Viacom - County)

Basic: \$20.25
27 channels included in basic

Premiums: \$10.00 - Showtime, Disney, Movie Channel
12.00 - HBO

WASHINGTON CO. (OREGON) - Bruce Crest (503) 629-8523
(Jason Hewitt)

(Columbia)

Basic: \$19.25 (effective 4/1/91)
50 channels included in basic

Premiums: \$10.25 - HBO
9.50 - Cinemax
7.50 - Disney, Playboy, Showtime, TMC, AMC-Bravo
5.50 - AMC (alone)
(Rates effective 4/1/91)

WASHINGTON CO. (OREGON) - Bruce Crest (503) 629-8534
(Jason Hewitt)

(TCI)

Basic: \$18.76
31 channels included in basic

Premiums: \$10.95 - Disney
11.20 - Showtime, Movie Channel
11.70 - HBO
Packages - \$17.95 - \$27.95

SEATTLE - Debbie Lewis (206) 684-8498

(TCI)
(Viacom)
(Summit)

Basic: (TCI)
\$20.00 (+ \$2.00 converter chg.)
34 channels included in basic

(Viacom)
\$20.70
28 channels included in basic

(Summit)
\$19.18 (+ \$21.45 1 time converter chg.)
35 channels included in basic

Premiums: Average \$11.00 - \$13.00 (extensive breakdown due to multiple companies in area)
Summit - \$11.26 single/\$9.89 for two

YAKIMA - Wendy Warren (509) 575-6092
(Scott Daniels)

(TCI)

Basic: \$20.35 (+ \$2.00 converter chg.)
31 channels included in basic (includes AMC)

Premiums: \$11.95 - HBO, Showtime, Cinemax
9.20 - Disney

Packages - \$17.92 - \$27.95

VANCOUVER - City/County Cable TV Office (206) 696-8233

(Columbia)

Basic: \$17.50 (+ \$3.85 charge for remote w/o volume control; \$5.95 w/volume control remote)
43 channels included in basic

Premiums: \$11.00 - HBO, Showtime, Cinemax, TMC, Disney
4.95 - AMC

CHART 2
MIX AND QUALITY OF SERVICE**

Service Category	Cox 1981 Proposal	Columbia 1/90 Lineup	Columbia 3/91 Lineup
Variety	7	9	10
Premium/Movies/Pay-Per-View	5	8	8
Music	0	4	4
Sports	4	7	7
Children	4	5	5
Information/News	9	10	10
Clark County Community	3	3	3
Culture	0 (1 premium)	2	3
Enrichment/Education	3	4	4
Shopping	1	1.5	1.5
Inspiration/Religious	2	3	3
Local Broadcast Channels	6	6	6
Washington Programming*	3	4	4
Access	8	8	8
Spanish Language	0	0	1
Ethnic	0	0	2

*(Ordinance requires:
minimum of 35 channels

1 community access channel
1 educational access channel
1 local government access channel
1 leased access channel
(Improved Washington State new
coverage)

**Note: Number of services/channels exceed total channels available because
some channels are counted in more than one service category.

|| Enrichment/Education | 5 | 4 | 4 ||

THESE CATEGORIES ARE GRANTED IN THE SAME MANNER AS THE OTHER CATEGORIES.

Snapshots From Telecommunications' Leading Edge

California cities are testing a range of telecommunications technologies as a way of doing business. New technology, like fiber optics, the state's new CalNet phone system, institutional networks, computers, videotext and videodisc, are helping fire departments do training, planners make development decisions, citizens connect with their governmental representatives, and cities lower phone costs. As the number of hi-tech possibilities grows so does the need to work smarter and less expensively. As a result, municipalities are beginning to develop processes for ongoing telecommunications planning and management.

What follows is not a definitive description of municipal technology or a complete survey of all California city telecommunications users. Rather this report shares snapshots of California cities as they learn to live on the leading edge.

Fiber Optics: Clean, Fast and No Complaints

Fiber Optics refers to glass fibers used for sending electronic signals. Because each fiber has a capacity of 1,000 or more channels, fiber can move an immense amount of information very quickly.

The City of Irvine has been using a fiber system since 1982, according to Linda Ristow, Manager of the city's Information Services. "Irvine is a new city with a leading edge technology bent. The citizenry expect technology to help them, not get in their way. Residents call and complain that the lights aren't timed well to get them to work." In Orange County, 100,000 people live in Irvine's 49 square miles. Three hundred thousand more people crowd in during business hours.

"We went with fiber because of what it allows you to do. It's an extremely clean, clear and fast way to communicate. A line

is always available. We can facilitate everyone," Ristow explains. The system's only problem so far was the discovery that gophers were nibbling the fiber. Irvine adopted an uncharacteristically low-tech solution; they put the fiber through common garden hose.

The city's information is stored in a centralized database so everyone in the city gets, what Ristow calls, "consistent, reliable, up-to-date information". The computer has information a person wouldn't necessarily know. Five hundred dumb terminals, some of which are six to eight miles away from City Hall, access the database. Plans call for growth to 600 terminals, meaning there will be more terminals in the City of Irvine than full-time staff.

"The uses are just beginning to become clear to us," Ristow says. Everyone in the city has the same hardware and software. Word processing is centralized using WordPerfect. There is city-wide electronic mail. The graphics package is a pictorial form of city information. "You can, for example, identify potential areas for forestation and see clearly what's going on in terms of elevations and contours. Or to provide transportation for the handicapped or elderly you can use the system to find the optimum route. Or if we want to build a park, we can ask the computer, 'tell us where the children are'. Right now we're considering a monorail system and with a computer

you can do a lot of 'what-iffing'. Irvine markets its own software. The package includes capabilities for class registration, facilities registration, and recreation activities sign up. The finance package has approvals built into it. The geographical information system assists with planning development and land use. Planners can get immediate computer feedback as to the amount of development in a particular area, the project's feasibility, or whether zoning changes or an amendment to the general plan are needed.

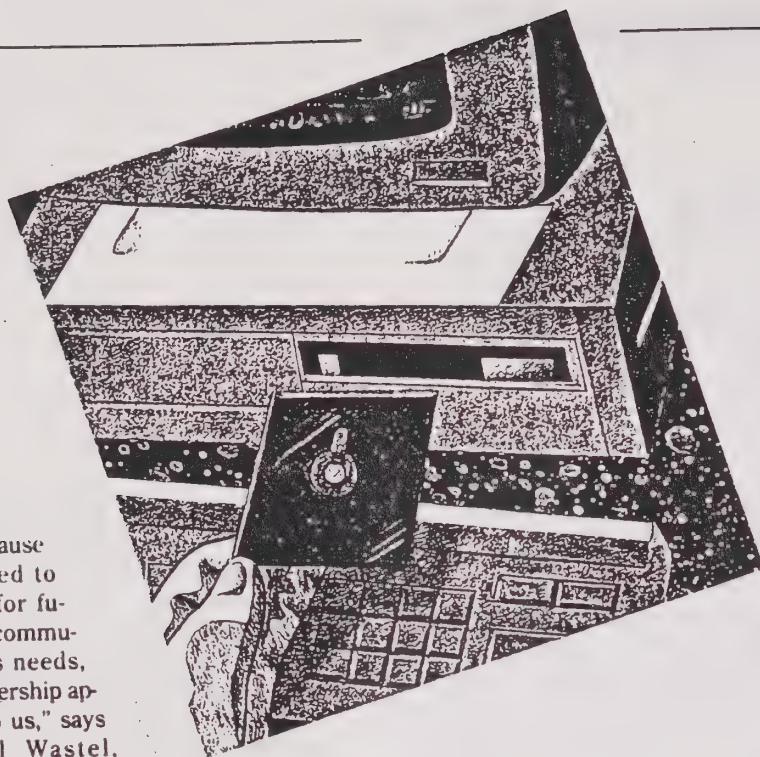
Irvine is exploring the idea of public access kiosks for the City Hall lobby with information about proposed development standards, plus another kiosk with information about clubs, social services, schools, homes and volunteer opportunities.

"There are certain things as a public agency we must do. We must protect the infrastructure, protect people, and create technologies to protect them. It's my feeling that technology helps everybody. I very strongly argue against pay as you go, or a charge back method," she said, explaining that doing so limits access to a system. "There are no savings when only one person or department has access to the information."

The potential for fiber to deliver everything from basic phone service to banking at home is being tested in a much-talked-about project in the City of Cerritos, a Los Angeles County city with 59,000 residents. Because all of the city's utilities are underground, a Cerritos cable system was a costly undertaking. When a cable RFP was released, there were initially no takers until a unique partnership was created.

Apollo Cablevision of San Luis Obispo now provides cable services; GTE of California built, owns and maintains the underground coaxial and fiber network; and the GTE Service Corporation of Stamford, Connecticut, is using a portion of the system to evaluate the feasibility of fiber op-

Evelyn Pine, the former Deputy Director of the Foundation for Community Service Cable Television, is currently Education and Outreach Director for Berkeley's Community Memory electronic mail system.



ties. "Because we wanted to provide for future telecommunications needs, the partnership appealed to us," says Michael Wastel, Public Information Coordinator for the city. The cable system has been operational since 1988. The City of Cerritos received no equipment or facilities as part of its cable franchise. The fiber tests began in the fall of 1989.

The system currently consists of coaxial cable throughout the city, plus empty conduit. Seven hundred and fifty homes are currently in the fiber test, with a total of 1500 homes wired with fiber. GTE is experimenting with both particular services and the technology. The fundamental feasibility issue is the cost of delivering fiber to each home. Using all prototype equipment, the company is providing telephone service as well as flashier interactive services like in-home banking. Cerritos and GTE soon will be testing out Main Street, and interactive information service on the coaxial cable.

According to Wastel, "Residents say great things about fiber. We've gotten no complaints and in a city when you get no complaints you presume everything is going great."

CalNet: A Network of Networks

CalNet is the new state phone system, to replace the Pacific Bell-run Automated Telecommunications Switching System (ATSS), which fell victim to the 1984 break-up of the phone system. The State of California's private line network was established through Pacific Telephone in 1960 so government agencies could communicate throughout the state on dedi-

cated lines. The law required that cities and counties also have access to the system. The benefit of the private network was obvious: It allowed government entities to communicate at half the cost. GTEL has through 1991 to duplicate the ATSS environment, according to Allan Tolman, assistant telecommunications chief for the State of California.

The CalNet project has two key goals: To replace the phone system cost effectively and to incorporate functionality into the new system. Although ATSS was a voice-only system, CalNet integrates voice and data through an integrated services digital network (ISDN). According to Tolman, "As cities find the economies to integrate the service, it will be available to them." Because so many city-related networks, like the League's own CITYLINK, exist, Tolman hopes that CalNet will become, "the network of networks."

A number of other features are also included. For example, through CalNet the state can provide 800 calling numbers at a less expensive level. Also CalNet can use a dialed 950 number access so smaller jurisdictions can use the system on a call-by-call basis. City and county employees can use calling cards to make long distance calls when travelling.

"We took into account municipal call-usage patterns when we developed design," Tolman explains. "Now for the past year and half we're having a series

of quarterly regional information meetings to discuss our plans with the cities."

Institutional Networks

An institutional network is a loop which links local institutions for point-to-point communications, a local cable network separate from the subscriber loop. During the cable franchising wars of the early eighties, institutional networks linking city offices and other community institutions were blue-sky bait for franchisees. In the past decade very few have been built or activated. However, in Santa Ana, a separate short cable is being actively used and its value documented. Santa Ana is an old Group W system, where Comcast is now the cable operator. The I-net connects 100 public agency sites including two library branches, 34 public schools, two college campuses, and the county supervisors' chambers.

According to John Risk, CATV Consultant for the City of Santa Ana, the Institutional Network is currently being used for two principal applications. The school district uses the system at night to send films and videotapes to classrooms throughout the city. The Fire Department uses the system for fire training, where the instructor is on video and the fire fighters at the stations communicate by microphone. Risk states the city has realized between \$80,000 and \$100,000 worth of training as a result of the system.

Bob Baker, the Fire Department's Captain of Training, calls the institutional network "tremendously beneficial to us. It's capabilities ease our workload." Training requirements from federal, state and local governments make fire department training needs substantial. Moreover, since the Santa Ana fire fighters work three different twenty-four hour shifts in multiple locations, logistics are complex. At the same time, firefighters must be available for emergencies. "The I-Net solves the

problem," Baker says. "You can train one third of the fire force at once. Moreover you can tape each training." Each station has a VCR, so if there is an emergency, the session can be taped.

"The benefits are staggering when you look at the potential," Baker said. He offers the example of the 1986 air disaster when two planes collided over suburban Cerritos, killing 67 people in the air and 15 on the ground. "The emergency response team who arrived on the scene first suffered from flashbacks after the disaster. The next teams, who were warned about what they would see, have dealt with the experience much better. Television could be a great medium for sharing information like that in emergencies," he said.

The Santa Ana Fire Department is part of a committee of the Orange County Fire Training Association that is developing a master plan to link every fire station in Orange County to video training and then develop a fire service program training guide. Baker also points out that more fire journals are published on video. Orange County fire fighters intend to share these materials.

Still, cable I-net technology is being challenged by local area networks and fiber optic links. Fewer I-nets are being built or activated. However, in Beverly Hills, Century Cable is completing an institutional network for Beverly Hills which will link five schools, the library, the police department, fire department, a senior center and the municipal courthouse. The city is in the process of developing demonstration projects. Interest is particularly high for in-service training of public school faculty, interactive student meetings, and earthquake communications projects, according to Risk.

Telecommunications Management

Integrating these different kinds of technology into an existing municipal structure is a challenge for California cities. Oakland and San Leandro both have developed planning processes to

begin to make telecommunications a priority within local government.

Oakland's Director of Corporate Information Services, Steve Ferguson, arrived at his job five days after the October 17 Loma Prieta earthquake. Although the city had begun examining its telecommunications system before, "the earthquake made communications planning more acceptable to management," he says. Oakland has created City Net to link up all city departments and eventually provide electronic mail, calendaring, and file transfer, fax, 24-hour City Hall, dial up access, and more.

"All cities spend hours ferrying paper around. And how many hours does a secretary spend on the phone trying to figure out a time when department heads can meet. Electronic mail, electronic calendaring, and file transfer can make that easy. After all, this is fairly common technology," Ferguson says. "This is not rocket science. It's the organizational politics that are the challenge."

Planning began in Oakland several years ago when the mayor formed an advisory group of private sector management technology experts. They



made three recommendations, according to Ferguson. "One, that the organization dealing with telecommunications planning must be highly visible, not buried in another department. Two, there must be a chief information officer. Three, the organization needs resources." As a result in July, 1989, the Corporate Information Department was formed. Formerly, data processing had been in the Finance Division.

An executive-level steering committee, called the Corporate Information Resource Planning and Policy Committee, chaired by the assistant city manager, the director of corporate information services, plus a collection of deputy city managers and department heads, is in charge of telecommunications planning. Due out in October, the plan the team is developing is explicitly linked to the budget process which begins that month. Budget instructions will require each department to submit a strategic plan for communications as part of their budget submissions. A performance report is the final step in the two-year process.

"The down-side," Ferguson said, "is that departments that have been on their own now feel that we are impinging on them. To overcome that, we need to solve immediate problems and show the benefits of networking. We need to create a function-rich network."

In San Leandro, an Information Management Steering Committee is responsible for long-range planning. Formed in 1985-86, the Committee used to meet once or twice a year to approve requests for microcomputer equipment. That has changed, however, as San Leandro has begun to look more closely at its information needs. The committee now meets every other week for two hours, according to Information Services Coordinator, Wandzia M. Grycz-Hernandez, who reports to the Assistant City Manager. The committee sees telecommunications planning as a way to quantify benefits, provide greater efficiency, improve direct services, provide audit trails and attract better applicants to the city.

The Committee focuses on the larger



systems, looking at applications like city-wide networking, records management, and geographic-based information. "As a backdrop for their fiscal year 1990-91 budget requests, departments made presentations to the committee outlining their plans for two to three years," Grycz-Hernandez explains.

The Steering Committee is also developing management briefings for the entire management group to educate leaders about communications in the city. "It's a way to make people understand that it's through automation that operational needs can be met. You don't have to add staff."

San Leandro currently has two hardware platforms: Hewlett Packard and DEC. "It's a challenge to connect the hardware. Citywide networking is really important."

"My goal is to understand the business of the city and the individual departments to automate and support their functions. This is a team effort and a learning process. You need the buy-in from users. That's very important. The point of all this technology is to provide tools to make people more efficiently, not for its own sake, but so leaders can concentrate and reflect on decisions rather than being subsumed by details."

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Telecommunications Management

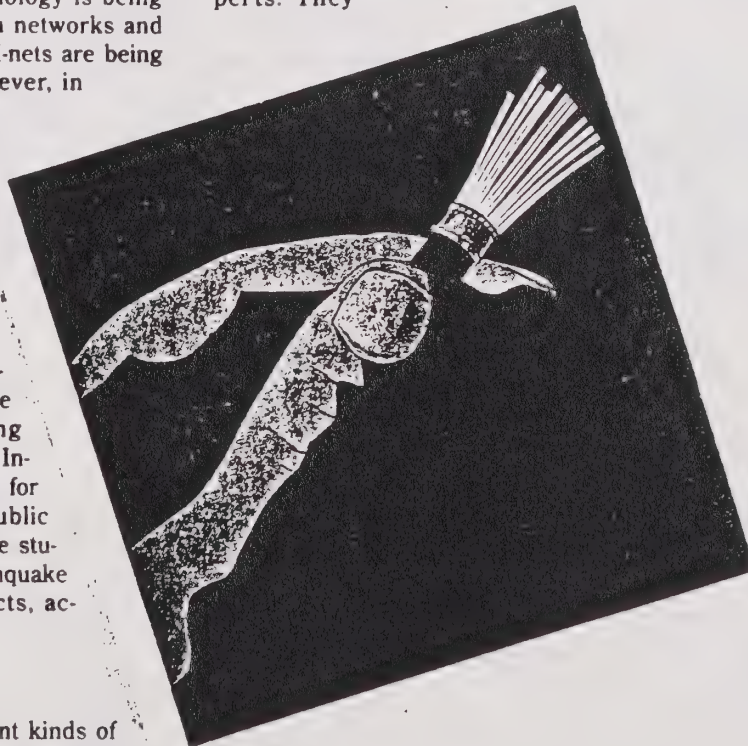
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The Rise Of The Electronic City Hall

By Evelyn Pine

In the past year, public access computer systems have emerged as an important new tool for sharing municipal information with the public. The California cities using these networks — Pasadena, Santa Monica, Berkeley — are only starting to assess their impact, and other communities like Oakland and Irvine are starting to think through how they might use these systems. As Francie Gilman, Program Director for the National League of Cities' Public Technology Institute (PTI), says, "The technology is not new. What's new is local governments' use of the technology."

The idea is straightforward: Place a computerized kiosk in a publicly accessible place where John Q. or Jane Q. Public can walk up and touch a keyboard or screen and access information ranging from city council agendas to community events to discussions about key local issues. Kiosks are located in city hall, community centers, libraries, shopping malls, even laundromats. The City of Cerritos is experimenting with delivering the service into homes via cable television. Santa Monica's Public Electronic Network can be accessed from home or office.

The basic technology is Telecommunications 101 — computer, modem, and telephone line — but the enhancements can be futuristic. In Pasadena, Santa Monica and Berkeley, the systems are based on videotext: a text information from a computerized database accessed on a video monitor. The State of Hawaii and the National League of Cities' Public Technology Institute offer touchscreen systems which don't demand typing skills or computer literacy. The PTI system makes use of videodisc for high quality graphic display and the Hawaiian system has voice capability — in three languages.

The systems developers — and the ju-

risdictions that use these networks — believe the new technology can pull citizens closer to local government through easier access to city services and an enhanced sense of community. In most cases, government supplies the information, and the citizen, with the punch of a button, can learn about building regulations or recreation department sports events. However, in Santa Monica, citi-

■

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■

zens are offered electronic mail access to city officials and special on-line conferences let citizens hash out the important issues of the day. In Berkeley, the Community Memory system allows citizens to add their own information to the database to respond immediately to any information they see on screen.

This article looks at a few of the systems now in use and takes a look at one city which decided to pull the plug on its public access kiosk.

24-Hour City Hall — Public Technology Institute

When the Public Technology Institute asked local governments to name their major concerns, public access to government information topped the list. PTI's Gilman says, "We decided to create a cutting edge solution."

In partnership with International Business Machines (IBM), Public Technology Institute created the 24-hour City Hall. The system uses touch screen technology and includes a special feature that can activate the videodisc. According to Gilman, "Any jurisdiction's cable office can supply the 24-Hour City Hall team with video updated remotely." If the jurisdiction buys a printer, hard copy can be provided.

Citizens choose among menus of options. Information can include anything from the location of city offices to parking regulations to community events.

Current pilot projects are in Kansas City; Hillsborough County, Florida; and Mercer, Washington. In Kansas City the kiosks are in shopping malls. In Mercer, Washington, (population 20,000), the two-month-old system is in a grocery store. The store paid for the hardware and software. The city paid for the videodisc.

The 24-Hour City Hall is not interactive — yet. "Users cannot interact directly. They can't pay parking tickets or message the Mayor. The interactive phase is next for paying parking tickets, distributing publications, providing AIDS information and signing up volunteers. When the system becomes transactional, there will be no limit to the benefits," Gilman predicts. PTI plans eventually for dial-in access from home or office.

Currently, the hardware costs \$9,000 to \$14,000 per kiosk, with an additional fee for the software. This price does not include printer or videodisc or the cost of the kiosk.

"We've learned from the pilots that this

Evelyn Pine, the former Deputy Director of the Foundation for Community Service Cable Television, is currently Education and Outreach Director for Berkeley's Community Memory electronic mail system.



must be a multi-department exercise," Gilman states. "You need as much information as possible. All appropriate departments should be involved but one person should be responsible. A technical team, trained in the workings of the software is also needed. We also recommend the development of a citizens' advisory group."

"This is a living service," Gilman states. "We're changing citizen's expectations of local government."

Public Access Library Service (PALS) — Pasadena

The backbone of Pasadena's Public Access Library Service (PALS) is a collection of databases developed over five years to meet needs identified in the community. According to Principal Librarian for Reference Services, Victoria Johnson, "Pasadena is a highly organized community with a ton of community events and community groups. This is an active community with lots of information to be shared. Usually information is shared by newsletter, flyer, bulletins, but these information sources are hard to track. PALS is going to solve the problem." Public kiosks are sited in libraries, and librarians are available to assist patrons in using the system. Additional public sites include a community center, the League of Women Voters' office, and the Pasadena Mental Health office.

The system is a network of linked micro computers. The hardware is a Digital Equipment PDP11 and software is a DEC Basic program.

Pasadena's Public Access Library Service (PALS) currently offers library patrons four databases. "Your Officials" is a current listing of appointed and elected officials. "This data base makes government a little more accessible," says Johnson. Information includes officials' names, addresses, and field representatives as well as where and when particular boards and

commissions meet, what they do, and what staff supports them. "The Calendar of Community Events" includes almost 1000 local events, indexed by type of event, name of event, date, location, and sponsor. "The Clubs and Organizations" database, listing 700 local organizations, is indexed by organization name or subject. "School Find" shows residents which schools serve their address. Planned databases include: human service organizations, an artist's registry, the city's organizational chart, and school information.

PALS is a parallel system to the Personal Access Regional Information Sys-

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Tom Nemecek

The City of Berkeley uses the system to publish city council agendas, promote city services, post job openings, and announce city news. The library's Berkeley Information Network supplies data on crisis lines, rental space, self-help law, and social services. The Cable Task Force uses the system to educate voters about the franchising process. The League of Women Voters, Berkeley TRIP, a nonprofit transportation store, and the Ecology Center all provide data for forums.

Community Memory (PARIS) developed by Edwin Stevens of EMDA, Inc. This commercial data base includes a schedule of local movie theatres and restaurants. To get PALS in your home or office, you must purchase PARIS. According to Johnson, Stevens "believes that in the future, radio will no longer be the information broadcast medium. Computers will be."

Currently, PALS is funded through the Pasadena Library Foundation Fund, monies given to the library from the California State Library. The current budget is \$100,000 per year. In the future a portion of fees earned by PARIS also will be used to support the system.

Community Memory — Berkeley

"The plus about the Community Memory System," states Berkeley Public Li-

brary Director Regina Minudri, "is that the users can add messages directly to the system. That means there is much more community involvement." The system is owned and managed by the Community Memory Project, a grassroots organization which has been developing community computer systems since 1978. The ten-terminal, public access network has kiosks in four libraries, a senior center, the International House at the University of California, a neighborhood development agency, the Ecology Center Complex, and two laundromats. As many as 150 people use it each day.

"We're interested in full participation,"

states Project Director Tom Nemcik, "Full participation means removing economic, educational, and cultural barriers to the use of the system and allowing each user full expression." The Project received a grant from the Telecommunications Education Trust to provide education and outreach on the system to low-income families, seniors and at-risk youth.

Mountain View: Lessons Learned

While other communities are gearing up to utilize this technology, the city of Mountain View, which unveiled an Apple-based kiosk in the public library in 1989, has put the project on hold. The Mountain View kiosk used a Macintosh II with a touch screen. The system combined graphics, animation, text, music and digitized sound through Hypercard, Video

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1. Basic design issues: Consult the community on what information is pertinent to them. Databases created with little community input tend to be irrelevant.

2. Key institutions that will be involved

in the project should be involved in the initial planning project.

3. Who is responsible for managing, maintaining, and updating the system must be clearly defined.

4. An ongoing funding plan must be developed to insure the long term life of the project.



The idea

is straightforward:

**Place a computerized
kiosk in a publicly
accessible place where
John Q. or Jane Q. Public
can walk up and touch
a keyboard or screen
and access information
ranging from city council
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to discussions about
key local issues.**



Works 11 and MacRecorder software. However, the project was technology driven, developed by staff of the Information Services Department. Although a number of other departments were involved at a cursory level, there wasn't a comprehensive plan for system management. "You need a champion to drive a system like this, as well as technical expertise and funding to pull it all together," states Assistant To the City Manager Connie Martinez. "We consider the project a low priority at this time in relationship to our other computer systems. A kiosk is not basic to the fundamental operations of the city; it's an enhancement, although we do intend to revisit the kiosk in the future, building on what we did do." Martinez raises four key issues in

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City Programmers:

By Evelyn Pine

In July 1987 CableScan contributed an article to Western City Magazine entitled "What's on Cable? How Nine California Cities are Meeting the Cable TV Programming Challenge." For our final issue, CableScan returned to some of the cities we'd visited with Western City to find out how municipal programming is progressing.

A New Sophistication

In the past year, most of the cities we'd visited had grown more sophisticated in their programming efforts. Elaborate computer graphics are beginning to adorn character generator community bulletin boards, program credits and illustrative footage. The impact of long running programs is being evaluated, and new shows are being developed. Time consuming documentaries are giving way to magazine formats and live specials.

The lack of suspense in November's presidential election proved to be a boon to municipal channels. Many viewers switched from the networks' national election news to the municipal channels' targeted look at key local issues. Controversies about local growth have made televised City Council meetings, Planning Commission meetings, and special hearings of particular interest to residents. Most cities have supplemented this kind of audience building increased promotion and marketing. And viewership surveys have begun to document a growing audience for municipal programming.

Stepped Up Promotion in Cupertino

Cable operator: United Cable
City population: 30,000
Number of subscribers: 9,000
Channel capacity: 60; 1P, 1E, 1G, 3C
Budget: \$132,000
Primary Budget source: City general fund
Staffing: IPT, 2PT

Two years ago promotion of the Cupertino municipal channel was primarily through the city's *Cupertino Scene* magazine. Now the schedule is printed in the weekly newspaper, the *Cupertino Courier*, and a monthly program guide is distributed at City Hall and at the United Cable office. Municipal Producer Kelyn Yamada credits the schedule's availability with increasing the channel's audience.

The channel has gained additional attention by covering live special public hearings about construction of a new highway and the closing of a local ice rink. "A man stood up at one hearing and testified that he'd been sitting at home watching the meeting and gotten so concerned, he immediately drove over to participate," Yamada recalls. The channel also gets requests for copies of meeting tapes.

Although the city has stopped producing "Local Government and You," with the League of Women Voters, the municipal programming has created two new series. "Take 53" features interviews with civic leaders about community issues. Topics have included the fate of homeless people in Cupertino, a ham radio op-

erators' emergency network, and holiday safety tips.

"City Beat Magazine," produced semi-monthly, is modeled after network news feature programs like "West 57th" or "20/20," Yamada explains. "The show includes in-depth segments as well as lighter profiles of departments or employees. We moved to this format after we discovered that documentaries tend to take too much staff time."

Video programming is on the channel from 6 to 10 pm Monday through Friday although City Council and Planning Commission sometimes run over time. The channel cablecasts about 20 to 25 hours of programming per week. Fifteen percent of the programming is locally produced. A character generator runs up-to-date city announcements when video programming isn't being cablecast. "We're hoping to upgrade the graphics on our character generator," Yamada admits.

Gill Cable holds an adjacent cable franchise which is up for renegotiation. Yamada hopes that Gill will eventually carry all three Cupertino access channels — public, educational, and municipal. "One of our major goals," she says, "is to be able to cablecast to all citizens citywide."

Blue Skies turn Stormy in Santa Ana

Cable operator: Comcast
City population: 260,000
Number of subscribers: 21,000
Channel capacity: 60; 1P, 2E, 1G, 3C
Budget: n/a
Primary Budget source: cable payments
Staffing: IPT

In 1987 KCCY, the City of Santa Ana's municipal channel, won the National Federation of Local Cable Programmers Award for the Best Government Access channel in the Nation. Four local government shows in addition to gavel-to-gavel city council meetings formed the core of the channel's schedule. KCCY was programmed 450 hours per month with four hours of original local programming per week. The city was also winding up a landmark series of pilot projects testing the use of its institutional network.

Three months later, the cable operator, Comcast, defaulted on its programming grant to the city. For a number of months the city paid for municipal programming out of its general fund, but since March 1988, the channel's character generator has announced that municipal cable activities are suspended because the cable operator has not paid the local programming grant. Ninety-five percent of the city's programming staff has been laid off.

Rancho Santiago Community College, the Police Department and the Fire Department all continue their I-net activities. Training, data transfer, and videoconferences continue via the I-net, and Comcast is providing a base level of maintenance to support the I-net usage. The city's development of a business plan to charge local institutions for I-net use is now on hold.

The 1982 franchise between the City of Santa Ana and Group W called for a \$1 million

dollar a year commitment for the 15-year life of the franchise to build a telecommunications center and support sophisticated local programming. In 1984 the franchise was renegotiated. Group W agreed to pay \$468,000 per year for municipal and public access operations and provide three letters of credit to equal \$2.5 million to build the telecommunications facility. In 1985, the franchise was bought by a consortium of cable operators who were buying up the Group W systems. Comcast, a consortium member, picked up the Santa Ana franchise in 1986. They stopped paying the programming grant for municipal programming in October of that year. Comcast has cutback but not eliminated the grant for public access. On December 1, 1987 fines began accruing against Comcast for franchise noncompliance.

In February 1988, Comcast filed suit in District Court seeking relief from franchise enforcement citing commercial impracticability and First Amendment issues. In March 1988 the City filed in Superior Court against Group W, Comcast, and the consortium.

"Santa Ana has become a rather litigious situation," reports John Risk, Director, Governmental Affairs, Communications Support, a consultant for the city. "For municipal programming, it's been riches to rags."

Increasing Popularity in Pinole

Cable operator: Viacom Cablevision
City population: 15,100
Number of subscribers: 85% of households
Channel capacity: 36; 35 activated; 1 combined PEG
Budget: \$20,000
Primary Budget source: City general fund
Staffing: 3PT

"We started up our combined public, municipal and educational access channel primarily using outside programming from the Foundation's Tape Exchange," explains Joseph Meneghini, Assistant to the City Manager in Pinole. "Now we want to create more local programming."

Pinole, with 15,100 residents, has 85% cable penetration. The access channel currently cablecasts eight hours of video programming per week. The channel's budget has increased from \$13,000 in 1987-88 to \$20,000. Public access coordinator, John Webb, works three days a week, assisted by two interns. The channel has gained increased recognition both from awards and a Viacom-sponsored audience survey.

In conjunction with Contra Costa County and the City of Hercules, the City of Pinole won first place in Governmental Programming at the Western Region of the National Federation of Local Cable Programmers' WAVE Awards. The trio beat out other California cities with programming budgets significantly larger than their combined budget. "Too close for Comfort" is a half hour special about home toxic wastes distributed throughout Contra Costa County.

Even more noteworthy are the results of a Viacom viewership survey which found the channel to be "moderately successful," beating out a dozen other channels including three PBS stations. "Our success is the result of good programming and effective marketing. Of course,

Towards a Citizens' Audience

When we cablecast elementary school programming, we end up with 400 happy kids, 800 happy parents, and 1000 happy grandparents, which doesn't hurt either," Meneghini points out. Ironically, only nine months before their channel number had been switched from 31 to 36.

To build on Pinole's success, three new shows are in development. "Pinole Portrait" will be a bi-weekly half-hour magazine show about community life. A high school news show with election footage is also in the works. Gavel-to-gavel City Council meeting coverage will launch in the spring. Meneghini points to Pinole's highly successful live election coverage as one of the motivating factors behind the new meeting cablecasts.

"We had a contested City Hall election and a local nuclear freeze initiative. City council members, the City Treasurer and the City Clerk all dropped by for interviews. Pinole residents got election results off cable election night that they normally don't get for two days. We got a lot of positive feedback both from voters and from Council. We're going to make it an annual tradition," Meneghini states.

The City has developed a training partnership with the Richmond Unified School District and Pinole Valley High School which have expanded their ROP program to include video training for community members taught by the access coordinators from the Cities of Pinole and Hercules.

To involve more citizens in the channel, staff is gone out to the Town Fair to shoot passers-by. They've also visited the local elementary school. The Cable Commission is planning a video contest for the spring to bring greater visibility to cable in Pinole.

The city has made studio improvements by upgrading equipment. An Amiga 2000 provides graphics capabilities. "Three years ago, we'd put two wires together, a spark would fly and we'd be on the air," Meneghini remembers. "We've discovered that the more sophisticated you become the more vulnerable you become to staff changes."

Hawthorne Thinks Locally, Acts Regionally

Cable operator: Paragon Cable
City population: 64,000
Number of subscribers: 12,000
Channel capacity: (6) 15 access; 1P, 2G
Budget: n/a
Primary Budget source: Franchise fee, cable access payment, interest from Group W lawsuit settlement
Staffing: n/a

"The City Council and the Mayor have given us a mandate to use video technology to benefit our community," states Larry Bender, CATV Administrator for the City of Hawthorne. Hawthorne is providing residents with quality local programming by working in partnerships with other Southern California cities. Hawthorne is both its Institutional Network (I-net) and a production facility with its closest neigh-

bor recently negotiated with Paragon Cable TV to own and operate the institutional network. Now, the city, which shares the 38-channel I-net with the City of Lawndale, has begun testing its effectiveness.

Both cities have the same I-net infrastructure, although the headend is housed at the Hawthorne Memorial Center, the city Parks and Recreation building. Two video channels on the I-net have been activated. A pilot training project is underway between the Los Angeles Department of Education and the local school districts to encourage teacher education and teleconferencing. Nine schools participate in the programs which are interactive via the telephone. Bender reports that the school districts are interested in contributing money for I-net use.

The City of Hawthorne has access to three studios. The City Council Chambers in City Hall where the cameras are wall-mounted is the site of cablecast city council meetings, Drug Task Force Meetings, and Police Department press conferences. A small studio in the basement of City Hall is used for other programming and to train city agency staff such as members of the police and fire departments.

A new community access facility in Torrance is shared by producers in Hawthorne, Torrance, Lawndale and Gardena. "It's a wonderful facility," Bender says, "and a unique situation in which four cities are willing to share. Warren Carter of the City of Torrance has been very cooperative and really made it work. The cross pollination between the four communities should be a real benefit. Already, by thinking regionally, we're discovering shared concerns."

Production continues on the two municipal video series: "Hawthorne Today," a bi-weekly public information show and "Hawthorne Happenings," a bi-monthly video calendar of upcoming events. A segment of "Hawthorne Today," called "Behind the Scenes with 'General Hospital'" won the "Creativity in Local Programming by Cities with Production Budgets of Less than \$75,000 Award" from NATOA this fall.

Bender has begun to put a larger share of his budget towards promotion including a full size ad in the quarterly Parks and Recreation

Activity Book and press releases about grants, programs and other activities to local media. The channel publishes a program schedule as well, which is distributed not only to individuals but to the 150 local nonprofits who make up the Chamber of Commerce's President's Council. "We're planning an audience survey for 1989," Bender says. "People stop us when we're shooting and tell us they watch, but we want to quantify our audience."

Meetings and New Shows in Santa Barbara

Cable operator: Cox Cable
City population: 85,000
Number of subscribers: 98% of the households
Channel capacity: 34; 3 access; 1P, 1E, 1G
Budget: \$55,000
Primary Budget source: n/a
Staffing: 1FT, 2PT, 12 interns

The City of Santa Barbara is still specializing in live meeting coverage. According to new Government Access Coordinator for the City of Santa Barbara, Tony Ruggieri, the channel cablecasts gavel-to-gavel City Council Meetings, Planning Commission Meetings and twice-monthly meetings of the Environmental Review Commission. Meetings are then rebroadcast the next day. The municipal channel is shared with the County of Santa Barbara which also cablecasts government meetings.

"We're viewed very favorably by the City," Ruggieri states. "The Council was particularly pleased with our coverage of the General Plan Update meetings which we cablecast live as a joint production with Cox Cable."

Since 1987, the city has developed a new magazine show called, "Santa Barbara City Scene," with segments focusing on city departments and Parks and Recreation activities. Santa Barbara produced 26 episodes in 1988, and is planning 13 new episodes for the new year.

The channel cablecasts 28 hours live per month and shows "Santa Barbara City Scene" three times a week. Meetings are rebroadcast 23 hours per month. Ten hours of outside programming is shown monthly. A computer scroll of PSAs, job openings, and community events is cablecast when no video programming is available.

Continued on page 12



Dubbed Alistair Carr, Beverly Hills Librarian, Michael Carr, interviews local authors on his long-running show "In Print."

City Programmers:

Continued from page 11

In Roseville: Growth of the City of the Channel

Cable operator: Jones Intercable
City population: 35,000
Number of subscribers: 8,893
Channel capacity: 42; 37 activated; 1G; 1 combined
Budget: n/a
Primary Budget source: City general fund equivalent 5% franchise fee
Staffing: 21T

"Because we're experiencing such phenomenal growth in Roseville, municipal programming has become a tool to keep the process democratic," states John Tarson, Assistant to the City Manager of Roseville. Roseville has shifted its emphasis from local talk shows to a mix which includes a lot of local meetings.

All Board and Commission meetings are cablecast including the City Council, the Planning Commission, the Project Review Commission, the Utilities Commission, the Transportation Commission, the Cable Commission, the Parks and Recreation Commission. Three nights a week are usually programmed with meetings which are then replayed at 9 the next morning.

"I really pushed meetings," Tarson states. "I'm convinced that because we're in a high development mode, it's important for the entire city to see and participate in what's going on."

The City has also upgraded its monthly, live half hour call-in show "Ask City Hall," hosted by local officials. A three minute tape about the evening's topic introduces each edition. The show is promoted on the character generator a week in advance. The local newspaper also puts an announcement the day of the show.

The channel is also creating a new half-hour, magazine show called "At Your Service." Segments include a close-up on a city department, an employee profile, and short features about city services.

The city has also produced live coverage and commentary of a holiday parade. A video tour of the Roseville Public Library is ready to cablecast. A video tour of the Roseville Park System highlighting amenities, services and facilities is also in the works.

When the channel isn't cablecasting video programming a character generator runs meeting agendas, PSA's from city departments, announcements of road closures, and sports scores from the recreation league.

According to a Jones Intercable commissioned survey, of the then 7,000 Roseville cable subscribers, the municipal channel had between 1,000 to 2,000 viewers.

Cable Rebuild in El Segundo

Cable operator: Paragon Cable
City population: 16,000
Number of subscribers: 3,700
Channel capacity: 60 in March; 2 access, 1G, 1PEG
Budget: \$72,000
Primary Budget source: 5% franchise fee, 1.5% access fee
Staffing: 1FT, 4PT

"In El Segundo, we're at the crossroads," says Community Cable Supervisor, Wendy White, regarding the cable system's rebuild. In March, once the rebuild is complete, five community sites will have live cablecasting capability: the High School, The City Hall, Joselyn Senior Cen-

ter, the Library, and the Fire Department. "The cable company is making a \$1 million investment," White reports. "So we're willing to renegotiate the 1971 franchise with them at this time."

"Our most successful municipal series has been 'The Wonderful World of Water,' by the Water Department," White reports. The show gets mentioned a lot in the employee newsletter, and the producer includes other employees in the show. Fourteen episodes have been produced in two years. The Police and Fire Departments have also begun producing PSA's. "Those departments have become more convinced of cable's value," White points out.

White also covers local events like Community Appreciation Day, Fire Safety Day, Concerts in the Park, the Fourth of July and local sports -- often in partnership with the LO staff of Paragon Cable. Public meetings including City Council and the Planning Commission are cablecast live and then rebroadcast the next day. Outside programming includes "Story Time" and the "In Print" series. (See article on



At Benoit of El Segundo's Water Department produces and hosts the "Wonderful World of Water", a series featuring water conservation information. Staff members Shad Solis and Karen Brunner serve as crew.

Libraries and Cable TV, page 4.) White hopes to produce a news magazine show in the coming year.

There is a high level of cooperation between the local schools and community cable, according to White. The production facilities are housed in the high school, and White teaches a high school video class. The channel also covers graduation, assemblies, school plays, band concerts and holiday recitals. The cable division is under the direction of the Department of Parks and Recreation.

"We're very much in transition, but the rebuild and renegotiation have brought a renewed interest in access," White says. "Our new city manager has positive, motivating ideas about the channel. Our city council is very pro-resident. They understand the value of cable as a tool for reaching our citizens. I want us to be really good for this city."

Marketing to Build Audiences in Pasadena

Cable operator: Choice TV
City population: n/a
Number of subscribers: n/a
Channel capacity: 66; 56 activated; 1P, 2E, 1G, 1 C-Span II
Budget: \$500,000
Primary Budget source: City general fund
Staffing: n/a

"The city council has asked the municipal channel to double its output in 1989," explains Telecommunications Administrator for the City of Pasadena, Victor Laruccia. Nonetheless, Pas-

adena's municipal channel has moved its focus away from high quality video documentaries to creating more in-studio municipal cable shows.

"To support our new emphasis on studio production," Laruccia states, "we are taking the tack of a regular station operation and looking to scheduling and marketing to build a loyal audience for our shows."

"The city council sees the channel as one of their most effective communications vehicles so they want to be sure that it's being watched," Laruccia continues. "They've allocated a small budget of \$10,000 specifically for marketing."

Laruccia hired Kit-Bacon Gressitt to coordinate promotion. Projects are now tied into the channel's name identification and new logo. A station identifier with a neon logo and doo-wop station jingle is being produced. Bill stuffers have been enclosed in cable and municipal power bills. Flyers, promotional pieces, PSA's and articles have been developed.

The city has supplemented the two series it was producing in 1987 with "City Beat." This monthly talk show on local issues features the

city's director of Public Affairs and representatives from the two local papers.

In addition, the channel is bringing four more new shows on line. "Pasadena Arts Magazine," produced in conjunction with the Pasadena Arts Commission, will focus at least one segment per show on activities at the world-renowned Pasadena Playhouse. A news magazine featuring the high school journalism class is a co-venture with the Pasadena schools. The Urban League will co-sponsor "the Job Connection," which will include job listings and career search tips. "Let's Talk" features both a live audience and live call-ins to encourage discussion of key regional issues. These shows should be up and running by the end of April.

A marketing plan was required for each series. "We clearly define the potential audience and how we will work to reach that audience," Laruccia states.

The channel has also found its audience by covering community planning sessions, Commission on the Status of Women meetings, and a childcare conference at Pasadena City College. The channel also provides four-camera, gavel-to-gavel coverage of city council meetings. "Picture Me Able," a municipal program about disabled artists, won a WAVE award from the western region of the NFLCP.

The Telecommunications Department is also involved with planning for an interconnect with the City of Altadena. The school district, the local college, and the county would also participate in two shared channels.

From "Library Land" to Futtsu, Japan

By Evelyn Pine

"Because libraries have long served as a focal point for community information, it's only natural they should develop partnerships with cable TV's community channels." Regional Consultant for the California State Library, Jim Henson wrote in the Winter 1984 issue of CableScan. His article, "State's Libraries Forming Partnerships with Cable," profiled eight libraries around the state using cable to create community bulletin boards, author interview shows, children's programming, shows about library services, video archives, and effective access management. In the same issue, Buena Park Librarian, Mary Ellen Ritz wrote about the challenges of her job in "Buena Park Library District: Librarian/Cable TV Coordinator."

In the summer of 1987, Nina Moore, Foundation Manager of Information Services, zoned in on the distribution efforts of California's libraries. She noted in the CableScan article, "Libraries and Cable: The Marriage Matures," that "Libraries are organizing both nationally and locally to increase their use of cable and video."

For this issue, CableScan contacted the libraries we'd highlighted in past issues to catch up on their latest efforts. At the article's end, we also look at the national effort to create a network of libraries who use cable TV.

"Library Land" and Other Realms

In 1984 Mary Ellen Ritz had just initiated two programs produced by the Buena Park Library: "Library Land," a children's story hour, and "Book Talk," an authors' interview show. She has since produced over sixty "Library Land" shows and almost two hundred episodes of "Book Talk." When the shows began she was cablecasting over a dedicated library channel in Buena Park. However, she programs three hours a day on Comcast Cable's Local Origination channel which reaches 35,000 subscribers in Buena Park, Placentia and Fullerton. She supplements her two locally produced shows with programs from libraries around the country as well as independent producers.

The Buena Park library channel, cablecast to Buena Park only, is reserved exclusively for character generated announcements of library activities: meetings, book sales, preschool services and story hours.

Ritz promotes her program through promo spots on the LO Channel. Her program is funded through grants from the Buena Park Foundation. This year she received grants totalling \$15,600 for six shows per month, "although I try to do more," she says.

Although Ritz has never done an audience survey, she says the library and cable company get calls when the programs aren't on and that people recognize her at the library as the "Librarian from television." The Buena Park library tapes 1/2 inch VHS copies of the two programs to their patrons.

Ritz has spearheaded the American Library Association's video distribution efforts. Through that mechanism and the Foundation's Video

tape Exchange, she has received tape requests from across the country. This year Ritz decided to streamline her program distribution through a tape bicycle. Ritz sends out a single tape to the first participant in the bicycle. When that city, library, or access center has cablecast the show, they send it along to the next on the list. Twenty-four cities participate in the bicycle including Fullerton, Seal Beach, Newport Beach, Seattle, Chicago, Ellicott City, Maryland and Washington D.C., Staten Island, South Wyndom, Connecticut, Charleston, West Virginia, Fort Lauderdale, Boca Raton, Clifton, New Jersey, Roseville, Mountain View, Pinole, Lakewood, Linwood, El Segundo, Norwalk, San Bernardino, Santa Ana, City of Industry and Riverside.

"In Print" Across America

In 1984, Beverly Hills Librarian, Michael Cart, was producing a 30-minute author interview show called "In Print" which was airing on the city's municipal cable channel. In the ensuing four years, Cart has produced over 260 shows which are distributed, thanks in part to the Foundation's Videotape Exchange, to almost 150 cable systems in the United States and Canada. Cart has been dubbed "Allstair Cart" by the other Beverly Hills Librarians, according to Acting Library Director Tim Gregory. "In Print" won a first place award from National Association of Telecommunications Officers and Advisors (NATOA) in 1987. The Library's role in cable should increase significantly next year, Gregory adds, when the new library is built; the cable access studio will be housed in the library's basement.

Reaching Readers in New Ways

In 1984 the Huntington Beach Library was producing *Lollipop Locomotive*, a children's story hour as well as community announcements and public notices. In the past four years, they've developed a number of new programs, according to Ron Hayden, the Library's Director.

Just Browsing, is an upbeat look at library issues and services featuring a roving reporter and new wave music. The show tackles everything from literacy education to author's interviews. They also do programs about business, including a very successful show about careers which featured a *Saturday Night Live* format skit in which two job applicants railed about which was better prepared for an interview using library books, videos and audiotapes. The library, then, distributed a list of all the materials mentioned on the show to interested patrons.

The Huntington Beach library also tapes its fundraising events for future cablecast to increase citizen awareness of their capital campaigns. For example, the annual Valentine's Day Party, "The Taste of Huntington Beach," a \$50.00 a couple party featuring food and wine from local restaurants, is documented each year for replay as is their annual Car Show.

Huntington Beach Library cable activities are funded by the city, but librarians coordinate the

productions and serve as hosts and producers. Rogers Cablesystems, Inc. does much of the production. Library programming is seen on channel 3 which is between CBS and NBC on the cable dial. "We can reach 60 to 70,000 homes through cable," Hayden says. "It's a great opportunity for us."

In Torrance, the Public Library has continued the programming it began in 1984 including "Story Time" for kids and in-depth informational programming focusing on special library services. New activities include a bi-weekly feature on special services on the City Magazine show and a talk show with local authors, according to Cable Administrator, Warren Carter.

"The typical person doesn't understand the vast amount of information available in public libraries today. TV and video are the best way to get that across."

Bookmobiles and Budget Constraints

Four years ago the Fullerton Public Library was in production at the studios at Fullerton College on a three part series on branch library services, reference and the bookmobile. Although the Library completed all three shows, cable production is on hold for the current year, according to Brian Taylor, Audio Visual Librarian, because of diminished budgets and skyrocketing production costs. "The Bookmobile program received the largest response," Taylor said, "because the Bookmobile librarian really publicized it. He hopes to produce shows about special library services and compact discs in the future."

The Monster and Other Mayors

The City of Orange Public Library continues the programming it was producing in 1984, including their popular children's programming. Puppet shows and kid-to-kid book reviews over cable supplement the Library's Summer Reading Program. The annual Children's Halloween Costume contest is the most popular program on community access according to the staff at ATC, the cable operator in Orange. The newly elected Mayor has begun planning for the 30 minute "Orange Today" program in which the mayor hosts a show devoted to city issues such as traffic congestion and earthquake preparedness. The Library has also helped the Fire Department prepare titles for their "Talking with the Chief" show. "We like to put our shows on community access rather than municipal access because it helps build that channel," states Ri-

Cable and Libraries: The Love Affair Continues

rd Serrato, Media Specialist. "We don't want compete with community access. We want to see it thrive."

Cable Programming as Cultural Exchange

In 1987 the Carlsbad Public Library's link to cable TV was primarily as a tape archive and distributor for local access videos. In 1988, however, the library has expanded its role both in program production and in access management.

Carlsbad has become the first library in the country to cablecast the American Library Association's "Library Video Magazine" with local library programming. The show provides specific information about innovative library services around the country — everything from optical discs at the Library of Congress to library kiosk services at suburban shopping malls. Bill Richmond, Head of the Carlsbad Library's Audio Visual Services, combines the quarterly A.L.A. material with localized information from Carlsbad to produce *The Carlsbad Video Magazine*.

"The typical person doesn't understand the vast amount of information available in public libraries today," Richmond explains. "TV and video are the best way to get that across." *Carlsbad Video Library* is an eight-part, half-hour series. The first episode was cablecast in July 1988.

The program is the result of a unique funding partnership. The Foundation for Carlsbad Community Television, committed to encouraging use of the local access channel, provided a grant of almost \$1,795. The American Library Association agreed to waive a portion of their cablecasting fees as well as supplying 3/4" masters of the national show. The Friends of the Carlsbad Library also contributed. Daniels Cablevision provides equipment and crew.

The show received a lot of coverage in the local newspapers because of library press releases. "We also took advantage of the local ad avails on MTV," Richmond explains. "Among the advertisements for CDs and cassettes, there was a thirty second spot for *Carlsbad Library Video Magazine*."

The Library received an additional grant from the Foundation for Carlsbad Community Television to create a show about the Sister City Program with Futtu, Japan. *Sister City* documented the first Carlsbad Sister City delegation to Japan. When matching funds to hire a Japanese film crew fell through, the City of Futtu supplied a videographer for the production. The program will be promoted through a large screen video presentation at the Cultural Arts Center followed by a panel discussion about the trip by members of the delegation.

The Library also helped the Foundation for Carlsbad Community Television to track down interviews to translate the voice overs on locally produced tapes to exchange with their Sister City in Japan. A range of programming, including the State of the City Address, was included.

Video Explosion in the Stacks

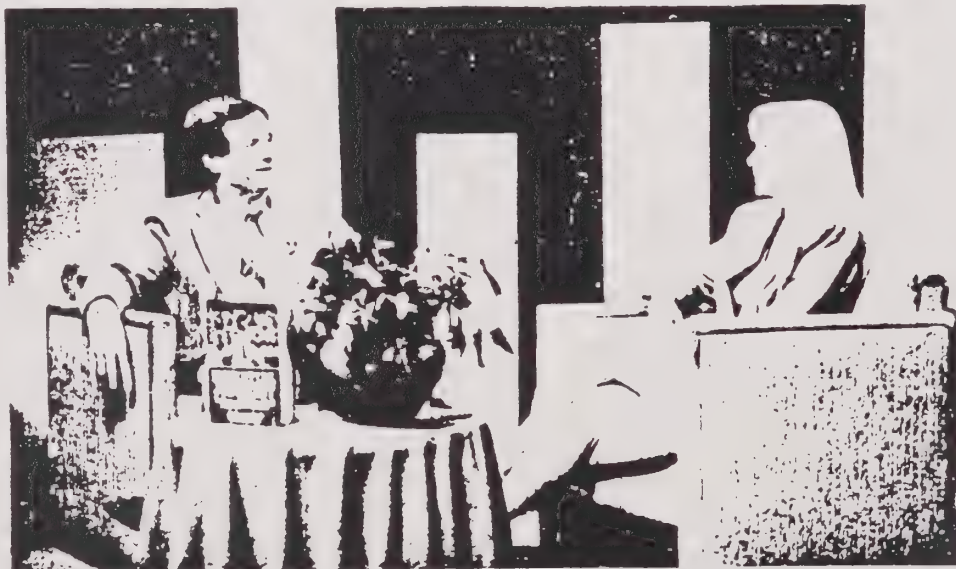
The past four years have witnessed a video explosion nationwide. Many libraries have begun to develop extensive video collections which are enthusiastically used by patrons. Community cable programming — because of its unique local focus — often is a key element in video collections.

In Summer 1987, Ann Campbell of the National City Public Library was just starting to use the Foundation's Tape Exchange to track down video titles for San Diego county's Serra System Video Collection. The Serra System is a cooperative of 13 libraries in San Diego and Imperial counties which shares materials and resources among all member libraries.

"...our video collection had come under fire as being simply for entertainment. Now it reflects the same areas as our book collection."

Now in its third year, the Serra System Audio Visual Committee has contacted San Diego County Social Services organizations information on locally produced programming. They have added a range of new programming including bilingual parenting shows, programs about AIDS, an introduction to San Diego County, and a number of programs by Foundation for Community Service Cable TV Grantees. A local hospital has also supplied a health-care series.

The project is funded by the Serra System Administrative Council. "We provide libraries with a very special collection," Campbell states.



Mary Ellen Ritz, Buena Park Librarian and producer of 'Book Talk', interviews the Dean of NFL couches, Jim Tunney, about his new book, *Impartial Judgement*.

"We also send a letter to all local groups to alert them to the range of tapes that are available. Patrons are so avid to check-out video that they'll be willing to check out programs that are non-entertainment such as a tape providing tips for a job interview."

"The project is very exciting to me," Campbell continues, "because our video collection had come under fire as being simply for entertainment. However, now it reflects the same areas as our book collection."

Archiving Local History

In 1984, Alice McNamee of the Marin County Library was producing story hours, public service announcements, and special programs on Viacom Cablevision with an assist from Marin Community Video. Since MCV's demise in 1986, the Library has not produced programming because of budget and staff constraints.

Nonetheless, the library serves as a receive site for the Arts and Entertainment Channel since Chambers Cable in Novato provide a VCR and a cable drop. The library also houses a number of tapes from Marin Community Video which form the core of the local history collection. The video documentation of the Buck Fund trial is archived there.

National Library Cable Utilization Group

Nationally, membership in the American Library Association's Cable and Video Utilization Interest Group, a division of the Library and Information Technology Association, has skyrocketed. Interest Group President for 1987 and 1988, Mary Ellen Ritz reports that the group has developed a database of two hundred librarians who participate in cable television. "We've also completed preliminary research for a library-to-library tape exchange," Ritz explains. "We hope the American Library Association will publish our first catalogue of tapes in 1989."

The Video-literate Classroom

In Maryland, thanks to Metrovision fiber system, school's in

By Vincente Padeloup

SCHOOL'S NEVER BEEN BETTER: You attend class on TV, miles from the teacher. On a split screen you can watch distant classmates perking up to answer a question or slumping on their desks. But be careful: if you snooze through the lesson, you can still be called on by the teacher, who sees you on a monitor.

An interactive cable network linking six public high schools with two-way audio and two-way video has been functioning since September in Prince Georges County, Md., thanks to the Metrovision Inc. system there. About 35 students attend the cable classroom every weekday.

It took Metrovision 18 months, 20 miles of fiber and lots of ingenuity to create the network.

The problem: Teachers of advanced programs were scarce and expensive in the community. There simply were not enough students in each school to warrant college-credit courses.

Working with cable

The solution: linking classrooms with cable and pooling the teachers. Suddenly it became possible to gather enough students from different schools, six to eight each, enabling them to be one step ahead for college.

Each school has equipped a classroom as a television studio, complete with cameras, monitors and modulators. Tables are set in a half-circle, conference-style, and each has a microphone. When students ask a question, they are heard throughout the network.

Every day, one at a time, the teachers lecture their own class and, via cable, other students several miles away.

The architecture of the network was conceived by the local school district's Scott Schiller, Metrovision project engineer Doug Worley and several county officials beginning in the spring of 1988.

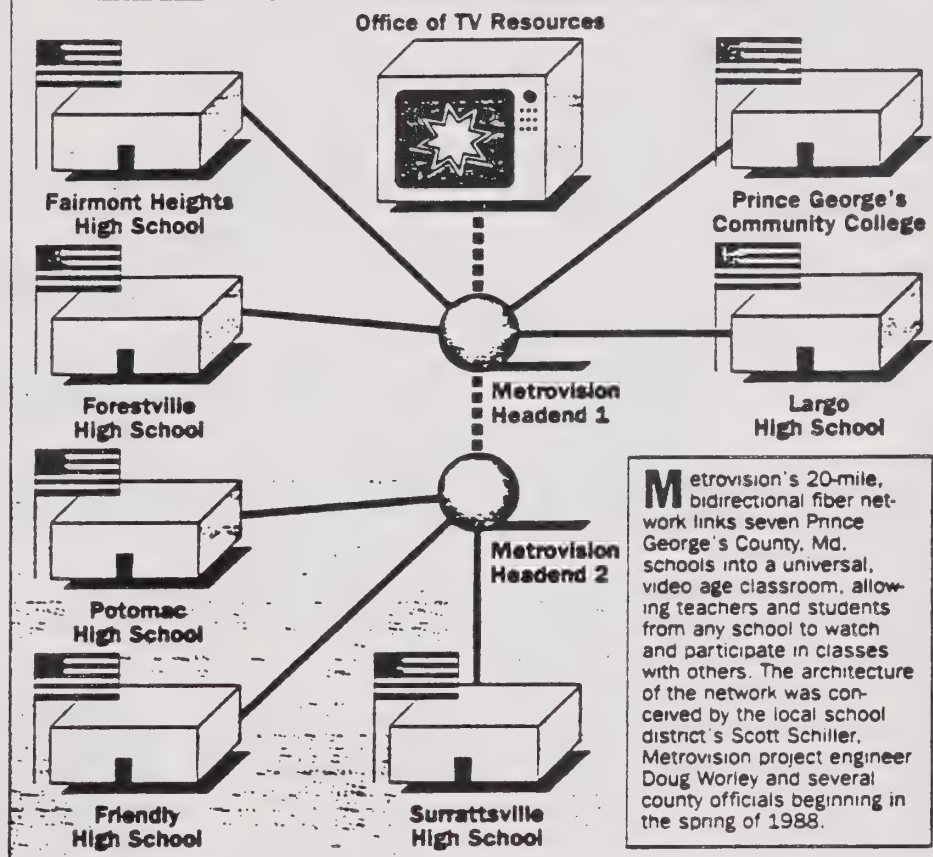
Funding was provided by a \$1.2 million grant from the Cable Enterprise Fund, which was fed by franchise fees.

Even though each school was already wired, a separate drop was put in to link them to one of Metrovision's two headends. One-hundred miles of reverse path on coaxial was also laid.

Because the pictures are run through audiovisual center eight miles north of the main headend, Metrovision decided to run fiber between the two sites — a

Prince George's County Interactive TV Network

■■■■■■ Fiber Optics Line (New) - - - - - Coaxial Cable (Existing)



first for the plant. (Anixter Cable TV did the subcontracting work.) Another fiber trunk runs between each headend.

Without fiber there would have been a 120-amplifier cascade between two sites linked in the network — the Bonnie F. Johns Educational Media Center in Palmer Park, Md., and the school at the southernmost tip of the network, Worley said. Picture quality would have been poor.

Started in June

Anixter started building in June and finished just before school started. The total cost for Metrovision, including construction and maintenance, was \$500,000.

The network uses the two highest channels on the system — 39 and 40. One is the "teaching" channel; the other is a four-way split screen showing the students in their different schools. Each

classroom has two 15-inch monitors to watch both channels at the same time.

Signals are sent from each school to the headends, using the reverse path. They then go on fiber to the Palmer Park center where they are mixed on a quad screen.

From there the pictures are sent back through fiber to the first headend, which sends them on coaxial to the three schools it serves.

The pictures also are sent through fiber to the second headend, which transmits them on coaxial to the three other schools.

In addition, the schools have installed a two-way computer system with an "electronic blackboard" — a pad equipped with a scanner. A telephone network and a facsimile machine are also used exten-

See **SCHOOL** on page 25

Cablevision Overhauls Management

CABLEVISION SYSTEMS CORP. will strengthen its focus on programming and advertising sales operations in the wake of a top-level management reshuffling that gives widened responsibility to new chief operating officer James Kofalt.

One of cable's most adventuresome MSOs when it comes to program packaging and investments, the 1.4 million-subscriber Cablevision hopes with the reorganization to allow some senior executives to "focus exclusively on growth possibilities for...cable, programming and advertising sales," said chairman Charles Dolan.

Dolan under the reorganization shares

School Uses Cable Delivery

SCHOOL continued from page 16

sively.

The curriculum, considering that it is delivered on a high-tech network, is rather classical: art history, modern European history, U.S. government, calculus, Spanish 4 and French 3.

But the modern technological approach has its champions. The system feels so realistic, said art history teacher Jose Delfin, that "when one student sneezes, the others say 'bless you' without even raising their heads."

Test results show students perform just as well as they would in a more traditional environment.

The electronic classroom also has reinforced Metrovision's "good neighbor" image. The system became operational two years ago and has 51,000 subscribers. No additional personnel have been needed to maintain the network. The county provides a production team that maneuvers cameras in the classrooms.

Having fiber has been so positive that Metrovision engineers "looked around to see where we could use it in other parts of the system," Worley said. Instead of building a third headend, they asked Anixter to run an additional 13 miles to cope with the system's expansion.

Another consequence: Prince Georges Community College will soon put its preparation course for the Scholastic Aptitude Test on the interactive network. The system will also be used by the city government for teleconferences and for training programs for educators. Schiller aid.

an office of the chairman with president John Tatta. Dolan remains chief executive officer.

Other changes:

■ Marc Lustgarten, formerly president of Cablevision's programming companies, appointed vice chairman for development.

■ Sharon Patrick, a McKinsey & Co.

principal, to join Cablevision as president of Rainbow Programming Holdings Inc., which produces American Movie Classics, Bravo, eight regional sports networks and News 12 Long Island. NBC owns half of the services, as well as the separately produced CNBC and SportsChannel America.

Patrick was in charge of the consulting firm McKinsey's worldwide media and entertainment practice. She has previously advised Cablevision.

The Oregon Cable TV Association Is Helping Some Very Special Children's Wishes Come True.

The Oregon Cable TV Association's first statewide public relations campaign was a dramatic statement for cable's commitment to community service.

The strategy involved targeting cable system employees, local libraries, local businesses and hospitals to join together with cable operators and the Muscular Dystrophy Association, in conjunction with the Make-A-Wish Foundation, in a state-wide fund raising effort to assist in finding a cure for this crippling disease.

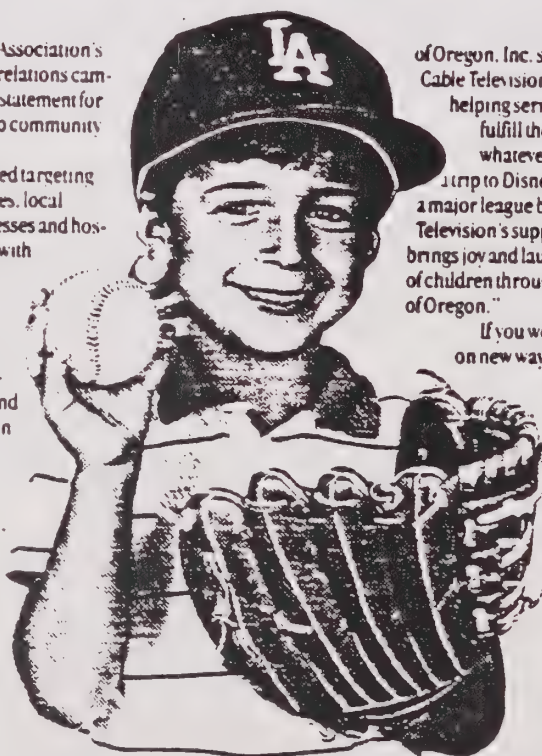
According to Nancy McMahon, "The Make-A-Wish Foundation

of Oregon, Inc. salutes the Oregon Cable Television Association for helping seriously ill children fulfill their favorite wishes, whatever they might be, from a trip to Disneyland to attending a major league ball game. Cable Television's support of these wishes brings joy and laughter to a number of children throughout the state of Oregon."

If you would like information on new ways to build an active presence for cable television in your community, contact...

**CABLE TELEVISION
PUBLIC
AFFAIRS
ASSOCIATION**

P.O. Box 9189,
Rosslyn, VA
22209-9988
703-276-0881



CABLE SCAN

Community Service Cable Television

Goodbye Ivory Tower

Cable and Education

Cable and education have always been linked, and educators are currently taking a closer look at cable as one of the new technologies available to them.

Schools and colleges, provided by franchise with channels, equipment, and cable drops, are developing a track record as cable programmers. Educators are using cable for instruction, vocational training, staff development, student recruitment, public information, video conferencing, and promotion of school programs and activities.

The cable industry is also providing educational programming. Cable program services like C-Span, Nickelodeon, Campus Network, Discovery Channel, and Arts and Entertainment offer a rich mine of educationally-oriented programs. Viacom Cablevision has developed a "Cable in the Classroom" campaign to teach local educators about the services available to them through cable.

Although educational use of cable in California is growing, obstacles exist. As a result of the Supreme Court striking down the "must carry" rule, some cable operators are dropping PBS channels which carry educational programming for local schools. Channel realignment has also banished some educational channels to the nethermost regions of the channel dial.

Moreover, cable has yet to become a significant part of education's agenda. Established educational cable consortia are facing stringent budget cuts in fiscal year 1987-88. Educators, unwilling or unable to fund their own cable programming efforts, are looking to the franchise fees as a funding source as they once looked to cable operator payments.

Outdistanced by other educational priorities for staff and funding, some educational channels remain blank. According to George Beers, Assistant Dean of Instruction for Foothill College in Los Altos, "Many educators got into cable naively. They didn't understand what was involved in programming an entire channel. Now the industry is always referring to the unused educational channels. The moral is don't do it unless you're going to carry through."

At the same time, however, educators are perceiving the value of television as never before. In California, the Department of Education's Educational Technology Unit has made video more accessible to classroom teachers and administrators. By providing VCR's to schools, cataloguing instructional television (ITV) according to state-mandated curriculum objectives and making group purchases of educational programming, the Educational Technology Unit has helped educators perceive of ITV as a tool to enhance current classroom activities. Because of these efforts, educators responsible for cable are finding new support among their peers.

The home video boom is also making video in the classroom less threatening to educators. At home, video is both an entertainment option and, increasingly, a training tool for everything from aerobics to zero based budgeting. At school, teachers and administrators who previously perceived of educational television as a high tech frill are demanding increased video services.

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California's Educational Cable Consortia

California educators have banded together in a number of consortia to garner resources during the franchising process and to share resources for effective educational utilization of cable's local channels once franchises are granted.

Because franchise areas rarely reflect school district boundaries, consortium-building makes sense for educators. Pooling resources to purchase and distribute programming, produce television, facilitate channels, undertake joint projects and take advantage of promotion opportunities make cable consortia an attractive educational option.

Although most of the consortia consist of only educational representatives, two of the organizations described below — Foothill Media Services Network and Mendocino County Community and Educational TV — include representatives from local governments and other institutions as well as educators. As Foothill Media Services Network representative Jim Delaney states, "We share a channel with other cities and schools. Through resource sharing, we all gain time, staff and equipment. And rather than having the burden of struggling to program several underutilized channels, we'll end up with an effectively programmed channel with broadbased local support."

CableScan reports on six California educational consortia — their purpose, structure and funding, and activities.

☐ Lakewood Educational Technology Consortium (LETC)

Founded: 1986

Purpose: "to effectively utilize the educational channel in Lakewood"

Members: all public school districts with schools in Lakewood: ABC Unified School District, Bellflower Unified School District, Long Beach Unified School District, Paramount Unified School District

Structure: joint powers agreement between districts; no paid staff

Funding: each district contributes to the LETC based on the number of students served

Activities: produces a math homework assistance project; programs a 125-page character generator, funded by a grant from the City of Lakewood; cablecasts satellite-delivered Special Education Conference to member districts

Cablesystem: Simmons Cablevision in Long Beach and Signal Hill; Jones Intercable in Lakewood

Contact: Jim Henricks, Assistant Director of Instructional Resources, Long Beach Unified School District, (213) 436-9931.

☐ Telecommunications Learning Consortium (TLC)

Founded: 1983

Purpose: "to serve as a consortium of community colleges and public schools to coordinate activities of members in planning, developing and operating regional educational telecommunications delivery systems and programs."

Members: three community college districts composed of six campuses: De Anza Community College, Evergreen Community College, San Jose City College, Mission Community College, West Valley Community College

Structure: joint powers agreement. A representative and alternative from each campus serve on Board. No paid staff.

Funding: Members participate based on telecourses they use.

Activities: buy and cablecast 100 hours of telecourses to 75,000 Silicon Valley households served by four cable operators; produce occasional live interactive shows as well as campus specific programming about college activities; produce Select-A-Show, call-in service, allows students to request a show they missed or wish to see again.

Cablesystem: United Cable, Los Altos & Cupertino; TCI Sunnyvale; Gillcable San Jose; Hearst Mountain View

Contact: Mike Holler, Executive Head of TV Services, De Anza TV Center, (408) 996-4766.

☐ Sacramento Educational Cable Consortium (SECC)

Founded: informally 1972; incorporated 1982

Purpose: "to provide instructional materials to schools in Sacramento through video technology... the intent is to reach groups with specific interests and needs not available through other sources."

Members: 17 Sacramento County K-12 school districts, Los Rios Community College, California State University, Sacramento, Diocese of Sacramento, Junior Museum-Sacramento Science Center, Sacramento City Public Library, Sacramento County Office of Education, PTA, University of California at Davis, McGeorge School of Law, University of Southern California's School of Public Administration

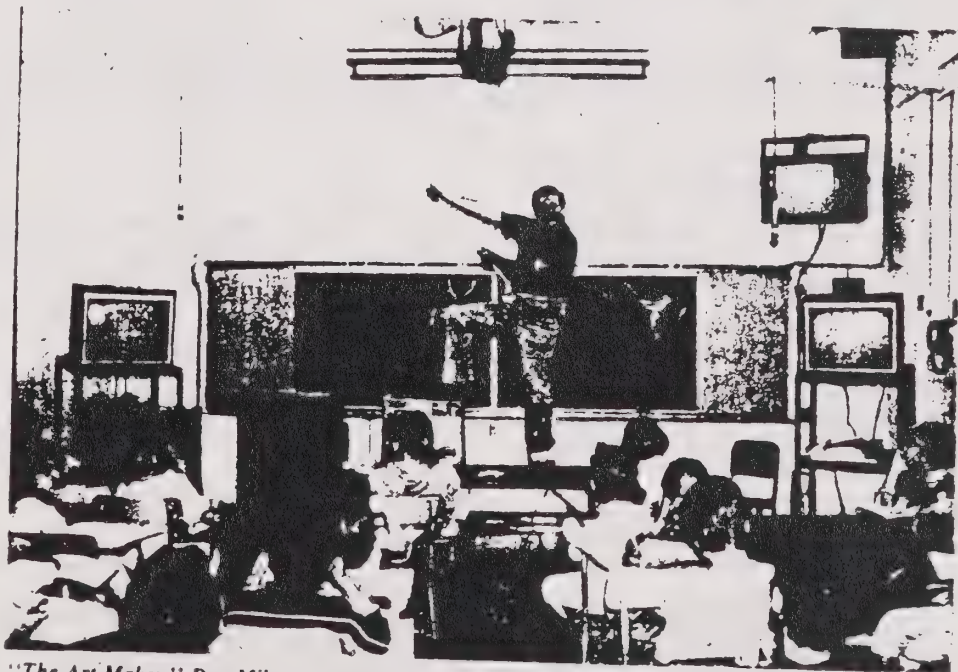
Structure: nonprofit corporation with a Board made up of representatives from each of the member institutions; paid staff.

Funding: grant from Sacramento Cable required by franchise; minimal membership dues plus in-kind support from participating schools.

Activities: cablecast 50 hours of programming per week including 10-14 hours of locally produced shows; encourage member institutions to create programming; set channel policy; create year-long program schedule; provide equipment and staff

Cablesystem: Scripps-Howard

Contact: Elizabeth Rhodes, Executive Director, SECC, (916) 920-1006.



"The Art Maker," Dan Mihuta entertains and instructs a class live on cable thanks to the Sacramento Educational Cable Consortium.

Educational Uses of Cable in California

	Educational cable channel	Pre-recorded instructional TV courses	Live instructional TV courses	Student produced programming	Video conferences	Homework assistance project	Character generator announcements	Student recruitment	Promotion of school activities	Staff development	Community programming	Satellite delivered educational network	Educational programming from nonprofits, government & business
California State University, Long Beach	X							X	X				X
Diocese of Orange					X							X	
Fairfield Unified School District				X		X							
Foothill Media Services Network, Glendale Burbank, La Canada-Flintridge											X		
Joint Council for Educational Technology, Huntington Beach	X	X		X					X		X		
Lakewood Educational Technology Council	X	X			X	X	X		X	X			
Mendocino Coast Community and Educational Television				X					X		X		
Orange Unified School District	X	X		X		X	X		X	X		X	X
Peralta Colleges Television, Oakland, Berkeley, Emeryville, Piedmont	X	X	X					X	X		X	X	
Sacramento Educational Cable Consortium	X	X	X			X	X	X	X	X			
San Diego County Office of Education	X	X				X			X	X	X		X
San Francisco State University	X	X					X					X	
Telecommunications Learning Consortium, San Jose, Cupertino, Los Altos, Mountain View	X	X	X		X			X	X				X

Educational Programming Sampler

California educators are using cable to teach, upgrade staff skills, recruit students, provide public education, video-conference and publicize school activities and programs. A sampling of programming from California schools and colleges is described below.

- **The Brotherhood II** — Fort Bragg High School students create a dramatic feature, retelling a school myth that a league of adepts lives underneath the high school influencing the world of those who learn above. (Century Cable)
- **The Carson News** — A local news show produced by Carson High School Regional Occupation students in partnership with American Cablesystems.
- **Student/Seniors Videoconference** — Members of the Santa Ana Senior Citizen's Center and religion students from Mater Dei High School used the City of Santa Ana's two-way interactive I-Net to share opinions and compare values. (ComCast Cable)

- **Orange County Education Today** — A one-hour videotape highlighting the Orange County Office of Education's programs and projects was cablecast on all 17 cable systems in the county.
- **State Economics Requirement Training** — Four learning sites were used by teachers to participate in a five-session training program facilitated by the Sacramento Educational Cable Consortium. (Sacramento Cable Television)
- **The School and the Microcomputer** — Available through the Regional Educational Technology Advisory Council, this show was cablecast for Orange Unified School District teachers to have an opportunity to understand the impact of computers on education. (American Cablevision of Orange)
- **Postcards** — California State University, Long Beach, presents videotaped slide shows of unique travel adventures by University faculty and staff. (Simmons Cable; Jones Intercable)

- **This is Your Life, Ben Franklin** — Joint Council for Educational Technology taped Fountain Valley High School History Instructors John Boyberg and Bill Lacy making American biography come alive by having students play the Guest of Honor's relatives and friends. (Rogers Cable TV)
- **5.2.6: Sixty Minutes of Homework Help** — Lakewood Council for Educational Technology produces a high tech math homework assistance project, funded by a grant from the City of Long Beach. The show features a futuristic set dubbed, "Tech Central," complete with a computerized color writing tablet, computers and laser discs all loaned or donated by corporations. (Simmons Cable, Jones Intercable)
- **Speaking of Schools** — The Superintendent of San Diego City Schools presents a monthly one-hour live call-in show featuring a guest student, teacher and parent cablecast county-wide.



Foothill Media Services Network

Founded: 1982
Purpose: "to encourage the meaningful use of public, educational and municipal cable access channels."
Members: Glendale Unified School District, Burbank Unified School District, City of Glendale, City of Burbank, City of La Canada-Flintridge, Glendale College
Structure: nonprofit corporation; no paid staff
Funding: state-mandated deregulation dues (pre-empted by National Cable Communications Policy Act, December 1986); equipment use fees.
Activities: produce joint programs like coverage of the Scholl Canyon Landfill project; purchase equipment; share staff time and hardware; survey and standardize equipment; award grants to local producers
Cablesystem: Sammons Communications
Contact: James Delaney, Glendale Unified School District, (818) 241-3111.



Mendocino Coast Community and Educational TV (MCCET)

Founded: 1983
Purpose: "provide access to cable by both the public and the educational institutions in the Mendocino County area."
Structure: nonprofit
Members: Mendocino Unified School District, Fort Bragg Unified School District, College of the Redwoods, College of the Redwoods, Mendocino County Superintendent of Schools, Fort Bragg City Council, Mendocino Coast Recreation Board, Mendocino Hospital Board
Funding: grant from previous cable operator for equipment; fees for channel usage
Activities: set policy for local channel; provide programming; provide occasional training workshop; provide basic equipment; tape city council meetings
Cablesystem: Century Cable
Contact: Charlene Aumak, Director, MCCET, Channel 6, (707) 964-0125.



Joint Council of Educational Technology (JCET)

Founded: 1983
Purpose: "to use television as an effective educational tool and to train teachers and students to effectively use cable technology."
Members: Huntington Beach High School District, Fountain Valley Elementary District
Structure: joint powers agreement; nonprofit foundation arm responsible for fundraising
Funding: each member district contributes based on number of students served; corporate grants
Activities: manage educational channel; cablecast 25 hours of programming per week; videotape classes, events, news; provide studio, equipment & staff.
Cablesystem: Rogers Cablesystems
Contact: Kelly Johnson, Programming Coordinator, Joint Council for Education Technology, (714) 847-6015.

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Appendix H

CSC CONSULTING TEAM

COMMUNICATIONS SUPPORT CORPORATION

Communications Support Corporation (CSC), a California corporation, maintains its principal offices in the Orange County communities of Santa Ana and Mission Viejo. CSC provides municipalities with comprehensive, unbiased, and clear technical and operating evaluations of municipally franchised cable television systems. CSC provides its clients with professional and thorough franchise supervision, enforcement, and negotiation services related to all communications issues confronting municipalities. CSC is headed by John Risk, Director of Governmental Affairs, and Jonathan Kramer, Director of Technology who provides technical, administrative, programming and operating expertise.

Communications Support Corporation's officers have provided consulting services to the following California clients (partial listing only):

- The City of Beverly Hills
- The City of Claremont
- The City of Duarte
- The City of Torrance
- The City of Thousand Oaks
- The City of Santa Ana
- The City of Fullerton
- The City of Garden Grove
- The City of San Clemente
- The City of Orange
- The County of Orange
- The City of Capitola

Communications Support Corporation does not offer its services to franchised cable operators.

Mr. John Risk, formerly the President of the Orange County Cable Association, holds a Bachelors Degree in Social Research from the University of Michigan. A member of the National Association of Telecommunications Officers and Advisors (NATOA) Board of Directors, and the National Federation of Local Cable Programmers (NFLCP), Mr. Risk has held various private and public sector management positions encompassing cable television production, programming, and franchise administration.



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Mr. Jonathan Kramer is a recognized cable television and communications engineer with broad practical, as well as, theoretical experience. Degreed in Radio Communications, Mr. Kramer is licensed for life by the Federal Communications Commission (License PG-11-35289) and the State of California (License C61-05-433113). He has served in a variety of technical management and field technical roles in the areas of cable television, broadband communications, telephony, and radio communications. He was elected a member of The Society of Cable Television Engineers in 1981. Mr. Kramer's expertise includes all phases of technical operations including satellite, microwave, local origination, headend and system construction and maintenance, franchise compliance, telephony, audio design, digital design, and radio communications.

CONSULTANTS

Mr. Wally Siembab of Telplan in Los Angeles is a project manager, telecommunications planner and an urban economist. He specializes in telecommunications needs assessments for local governments, educational institutions and community organizations. He has managed projects for his current firm, Telplan, and for his former partnership, McAdams + Siembab. His clients include the cities of Seattle, Washington, Dayton, Ohio, Pasadena, California, Atlanta, Georgia, Santa Monica, California and West Hollywood, California.

Ms. Kathleen Schuler is an expert in community and government uses of cable television and in community planning processes. Ms. Schuler served for the past seven years as the Executive Director of the California Foundation for Community Service Television. Her contributions to public service cable television earned her the 1987 "Woman of the Year" award from the California Cable Television Association. Ms. Schuler's experience in cable television and skills as a meeting facilitator have been invaluable to this project.

Ms. Harriet Moss, former cable television coordinator for the City of Mountain View, has extensive experience in cable television needs assessments. Ms. Moss has been responsible for regulating a state of the art cable system while serving as cable television coordinator for Mountain View, California. She has also consulted to cities, cable companies, cooperatives and local organizations on the community uses of cable television. In these activities, Ms. Moss was associated with Moss and Velie Association and with Computran Corporation.

Mr. Jay Smith is a partner with the internationally recognized accounting firm of Touche Ross & Co. His specific area of expertise encompasses cable television financial accounting and reporting.